COUNTWAY LIBRARY
HC 3JEG

BOSTON
MEDICAL LIBRARY
8 THE FENWAY

Digitized by the Internet Archive
in 2016

https://archive.org/details/journalofsouthca1319sout

The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, $2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.
J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.
WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital, Boston, Mass.

OBSTETRICS AND GYNECOLOGY.
ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY
M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.
G. T. TYLER, M. D., Greenville, S. C.
R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.
J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.
E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

THE SMALL COMMUNITY HOSPITAL.

The Journal has promised to lend its pages to the promotion of the small community hospital, believing that no one measure will prove of more lasting benefit to our people than this.

There has been considerable activity along hospital lines in this State recently and evidence of still further interest. The highest authorities on hospitals in America favor putting hospitals in places where they will be accessible to all the people. It is obvious that it will be impossible to construct new buildings in many localities for this purpose and a solution of the problem often presents itself in the remodeling of a residence already built. This has been done in numerous localities and successfully. The ways and means in at least one locality have been set forth in another part of this Journal. We clip a news item from the News and Courier, Jan. 13th, showing how the profession and the people of Summerville have met the problem.

Summerville Infirmary.

Some time ago the Laymen's Brotherhood of the town of Summerville undertook to raise sufficient funds to equip and operate an infirmary and hospital in the town of Summerville. This work has been actively in progress for some time, and about $2,000 has been raised and expended in the thorough remodeling, repairing and equipment of the old Samuel Prioleau Infirmary, which is ideally located for a hospital. The operating room has been fully equipped in every particular, and the hospital is now ready for

use. Other funds are available and numerous pledges for continuing the support have been secured.

The ladies of the town are also greatly interested, and have organized a Woman's Auxiliary to the Summerville Infirmary, of which Mrs. C. Irvine Walker is president. This auxiliary has been very active, has raised a considerable fund, which it now has on hand, and is conducting, under the management of Mrs. Walker for the benefit of the auxiliary, a tea room which is open daily to visitors and which has been largely patronized.

The executive committee of the Laymen's Brotherhood has determined to hold a mass-meeting of the citizens of the town of Summerville, and all others interested in the infirmary, at the Town Hall in Summerville, Thursday evening, at 8.15 o'clock, to discuss the question of the opening of the infirmary. Dr. A. E. Baker, of Charleston, who for years past has been prominently connected with hospital work, has kindly consented to deliver an address on this occasion, and there will be addresses by others.

Every effort is being made to secure a large attendance, and it is expected that this meeting will be a very full one and will be extremely interesting and instructive to those who attend.

The following article appeared in the Modern Hospital, January number, one of the highest authorities on hospitals in the world.

Old Buildings for Hospital Purposes.

This is not a brief for old buildings, and it seems to us that when the purpose for which a building was originally designed no longer exists, that building ought to be torn down and make way for a modern structure.

But this is a critical time. It is an era of hospitalization of the people, and the day is rapidly approaching when every sick man, woman and child will demand a bed in a good hospital when sickness comes; and when that day comes, the rich and the poor must share alike in the beneficences that the hospital affords —if not in the luxuries, at least in the scientific necessities of sickness.

Approximately 12 per cent. of the sick in this country who are ill enough to need a doctor are cared for in the hospitals, and about 88 per cent. in their homes. If this means anything, it means that the number of hospital beds in this country must grow amazingly in the next few years—not all at once, but in step with the education of the public to demand hospital care.

But hospitals cost money, and already we are building annually approximately $300,000,000 worth of hospital buildings, and we are spending almost an equal sum for the maintenance of hospitals.

If these are the facts—and they are —then we must think about some radical economics in our hospital service. These things will take care of themselves in large, wealthy communities, but out in rural districts and small towns, where there are not individuals of great wealth, but where all the people are in moderate circumstances and able to pay their way, it is going to be necessary to afford hospital service at a minimum cost. Very many of these communities are finding the money to build small, unpretentious, modern buildings; but there are many communities that are not so situated, but where a few thousand dollars could be got together if the people could be shown that for so small an amount they could have a decent hospital. In many of these communities there is a large, well built residence that has served its purpose as such, and is now ready either for

wrecking or for any other use to which it can be put. Many of these residences are thoroughly well built, and quite a few of them have such interior arangements that they could be transformed for hospital use for an extremely modest sum.

Fire protection is one of the very important factors in considering such a building for hospital purposes, but it is not the only factor, and with our modern methods, by way of outside fire stairs, interior chemical apparatus to put out fires in their inception, and by proper fire drill, we can go far toward eliminating fire risks in a one or two story dwelling house.

More of these abandoned residences ought to be pressed into service for hospital purposes in small communities. One such hospital in a town is worth more to that community, if properly administered, than dozens of finer hospitals that must be reached by railroad travel of fifty or a hundred miles.

Oconee Pioneer Field for Sociological Congress.—Public Health Work.

The Southern Sociological Congress has selected Oconee County for a unit of investigation along Sociological and Public Health lines. Seneca was one of the first of the smaller towns in the South to claim the attention of this important organization in December, 1916.

After a thorough investigation at that time it was decided to make Oconee County a pioneer field for operation in the smaller towns and rural districts. The Organization has already done some work at Rock Hill, Spartanburg and Greenville in this State. A specially equipped train is provided for the accommodation of about a dozen experts, which includes a special representative of the United States Public Health Service together with a large exhibit.

The decision to take this step was largely through the influence of Rev. I. E. Wallace, pastor of the Seneca Presbyterian Church. The results will be watched with keen interest on the part of all who are interested in better living conditions in our smaller towns, villages and rural districts.

Insurance Fees.

A number of inquiries have been received by the Secretary-Editor in reference to the fees for life insurance examinations. It is possible that quite a number of the younger men of the profession are not aware of the stand taken by the Association in this matter. There is also a probability that some of the older members may not be fully informed and therefore we copy herewith the minutes from the transactions of the State Medical Association.

"Adopted in 1907:

Whereas: Many of the life insurance companies have notified their Medical Examiners of reduction of examining fee from $5.00 to $3.00, and

Whereas: We as physicians, realizing the responsibility incident to proper examination of the individual, believe such reduction to be unjust: Therefore be it,

Resolved: That the South Carolina Medical Association, and the medical profession in sympathy with them, in session assembled, do hereby declare such reduction to be unjust, and respectfully request that no physician legally authorized to practice medicine in South Carolina accept such reduction of fee; and further that any physician accepting such reduction be guilty of a breach of professional courtesy.

Resolved: That it is the sense of this Association that hereafter in each

examination for life insurance in which urine analysis is required, the minimum fee shall be $5.00.

Resolved: That any County Society that has not complied, be required to appear before the Board of Councilors and explain why they have not complied with the request of the State Association in the matter of Insurance fees.

The following motion was adopted in 1914:

That industrial policies of $500 or under, and fraternal Insurance, be excepted from our insurance law.

The Scientific Committee Busy on the Annual Program—Spartanburg Meeting.

Plans have been practically completed for the meeting of the State Medical Association in April. We expect the program to be of more than ordinary interest this year, particularly from the standpoint of our own members.

The number of ouside readers of papers will be more limited than usual. The entertainments will be so arranged as to give the maximum of time to all who wish to read and discuss the scientific program.

Efforts are under way to provide scientific exhibits. The hotel facilities will be exceptionally good, owing to the completion of a magnificent hotel with ample accommodations for the Association and its meetings.

Quite a number of papers have already ben promised and the titles received, but we wish to urge the membership not to delay sending the titles of papers to the Secretary.

ORIGINAL ARTICLES

OBSERVATIONS OF AFFECTIONS OF THE POSTERIOR URETHRA.

By Wm. R. Barron, M. D.
Columbia, S. C.

THIS one and a half to two inches of the male urethra, extending from the triangular ligament in front and including the inner border of the sphincter vesicae, is prone to varied affections producing often a puzzling symptomatology.

Lying within the posterior urethra we have verumontanum with utricle in centre and common ejaculatory ducts on each side, anterior and posterior medium ridges, prostatic ducts and, I wish to include, the sphincter vesicae.

The pathological changes seen are large distorted verus, sinuses of utricle and prostate, ulcers, trabeculation of postmontane floor, papillomas and polypi.

Culturally and microscopically, I have often failed to identify the etiological factor in these pathologic changes found in the posterior urethra.

Some abnormalities may be congenital, some are the result of masturbation, others are the result of chronic irritations due to bacterial infections, of which gonorrhea is the most common.

Searching the text books and journals on this subject, I am disappointed at finding so little written on the

Read before the South Carolina Medical Association, Charleston, S. C., April 20, 1916.

symptoms produced by the pathological lesions of the posterior urethra.

Theories are plentiful and interesting, but they need substantiation of fruitful experience to make them therapeutic facts.

Relief of symptoms has given me faith in direct therapy as applied through the endoscope. The instrument I use in this work is the one devised by Dr. Hugh Young of Baltimore, with the light reflected from the proximal end.

In many of these conditions that I have observed in the posterior urethra, the neurotic symptoms have been most pronounced. I confess that in many cases I doubted my own conclusions until forced by my patients' grateful relief to realize that these, sometimes trivial abnormalities, were the sole cause of all their neuroses.

Symptoms complained of are: Premature emissions, masturbation, partial impotence, painful and frequent urination, pains in groins and perineum, too frequent nocturnal pollutions, recurrent urethritis, mostly gonorrheal, and azoospermia. The more general and reflex symptoms met with are bachache, pains in chest and limbs, disturbance of digestive function.

The general and constitutional symptoms are met with in those cases where there is some active bacterial foci, as in the gonorrheal folliculitis or ulcerated types of cases from which a sufficient absorption is taking place to produce a toxemia.

The urinary disturbances occur most often in the polypoid, papillomatous and ulcerated cases, especially where these affections involve the sphincter vesicae.

Because of chronic inflammatory changes in the posterior urethra premature ejaculations, partial impotence, "morning drops", and excessive nocturnal pollutions occur, and it is in these cases that we find varied neuroses.

The polypoid and papillomatous growths, when involving much of the vesicle sphincter, demand a suprapubic cystotomy for their removal; when not involving much of the sphincter vesicae they are successfully removed with the electric cautery of high-frequency spark. Small growths can be eradicated with the nitrate silver crayons.

My clinical case reports, which follow, are the result of silver nitrate through the endoscope.

Case No. 1. Man, age 40, married, no children.

Past History: Gonorrhea several years previous to marriage, which lasted over a year. For several months previous to being referred to me by his last physician, he had had prostatic massage, dilations with sounds and Kohlman dilator, irrigations, etc.

Symptoms when I first saw him were, urgency of urination, urinating every thirty to sixty minutes during the day and getting up from five to eight times at night to void. He had a "morning drop" but microscopic examinations were negative for bacteria. There were no shreds in glasses one, two or three. Fresh drop of seminal and prostatic fluid showed many pus cells.

On endoscopic examination I found an enlarged inflamed veru and an angry ulcer, involving all the lower half of the vesicle orifice. Owing to the long standing of this condition it took fifteen applications, beginning with 10% nitrate of silver solution and gradually increasing the strength of the silver up to the pure crayon, to completely heal the ulcer. The man now holds his urine for

three hours during the day and gets up about once at night to void.

I will say here that the constant dribbling of urine over the field of operation while working within the vesicle neck, is very annoying and sometimes one cannot keep the urine sufficiently aspirated in order to carefully burn all the ulcerated area, so I instructed my cases to take as little fluids as possible for six hours previous to treatment.

Case No. 2. Man, age 45. Wife and two children.

Past History: Had gonorrhea when a young man.

Present History: For past two years has had intermittent "morning drop", pains in perineum radiating into groins and back, and premature emissions. Has been treated by several doctors in various places with very little relief.

His urine and microscopic from his posterior urethra were negative. He had a mild prostatitis. I found his veru and postmontane floor much inflamed and the area bled easily from touching. Two treatments, first with 20% nitrate of silver solution, followed a week later with silver nitrate crayon, gave him perfect relief from all symptoms.

Case No. 3. Boy, age 19, weight 174.

History: Has never had sexual intercourse. At age of 14 years began masturbation and kept it up two or three times a week since. Brought to me by his father because of bed wetting, which he has done all his life. His urine, prostate and microscopics were negative. I found a very large veru with subacute inflammation of his whole posterior urethra extending into his vesicle neck. After the first treatment he ceased masturbation and after each subsequent treatment his bed wetting became less frequent. He has had altogether seven treatments, has gained ten pounds, mentally much brighter and is almost entirely relieved of bed wetting.

I have tried here to mention a few types of cases relieved by methods indicated above.

DISCUSSION:

Dr. Ross, Anderson, S. C.

Mr. President, I do not arise to add anything to Dr. Barron's paper, but merely to emphasize one or two things, one especially, being the beneficial effect upon sexual neurasthenics of treatment of the posterior urethra. It is wonderful the good results you get upon these patients who have previously been treated by massage, dilatation and irrigation, with no improvement. Very frequently we find patients who have had gonorrhea previously, possibly for years, and the effects of the gonococci have about ceased, but the patient still seems to have the trouble with him, mentally, any way. You go back into the posterior urethra and it is very sensitive to the touch. He will explain it feels very much like sticking a knife in him. After several applications the patient has greatly improved. I have never used stronger than 10 to 20 per cent solution.

Whether he has any trouble in his posterior urethra or not I don't know, but he improves by local applications to the veru, just the same. Especially will you find that the treating of the posterior urethra in the sexual neurasthenics will improve their condition, as no other treatment I have ever found.

Dr. F. A. Coward, Columbia, S. C.

I cannot agree with all that Dr. Barron says in regard to the pathology of these conditons. Without myself reflecting upon the practitioner in general, we have brought a good deal of reflection on ourselves by the

use of injections, etc. I believe that these conditions involve probably more delicate structure even than the general surgeon to-day is tackling.

A good many of us ("us" in the editorial sense) can go into a belly and find an ovary or a tube; some of us (again in an editorial sense) can take out gall-stones; but when you can find the minute orifices coming through the prostate, when you can cauterize the utricle, you are doing what you are entitled to do in undertaking the treatment of these cases. You must admit that most practitioners cannot do that, and that the quacks are claiming to do it, and they monkey around with various shiny instruments, X-rays, and what not, and that is the reason that these patients do not get the treatment that they should.

In regard to the causes that Dr. Barron mentions, I do not agree with him in all of them. I question seriously if masturbation is a cause of disease of the urethra. It may cause an irritation. There may be an irritation which causes masturbation. I doubt if anything but gonorrhoea causes these troubles.

The Senior Austin Flint said that he owed the success of his practice to the fact that he always suspected syphilis in his patients. We might, with profit, always suspect gonorrhoea.

We should send these patients to a man who is able, and competent and willing to take the trouble to make the necessary examinations and do what can be done, or to tell his patients frankly that he can do nothing. Now, a failure to do that in the past, and our willingness to insert sounds and injections of nondescript composition, is the cause of our patients going elsewhere, and it is the reason that a legion of quacks have sprung up.

Dr. Barron Closes:

Very often a man gets bored with these papers and they accuse the different men of taking up too much time. I have tried to make my paper to the point.

I have had my failures along these lines. I suppose that I have had between 12 and 15 that I have failed to do much for.

Dr. Coward takes issue with me about masturbation being a cause, and thinks there is always some infection there. I could not find anything with this boy. The act of masturbation itself, as we all know, will keep up a chronic inflammation of the posterior urethra. I do not say that deep down in the structures of his posterior urethra he did not have some bacterial infection. I could find none. I have had to put nitrate of silver solution down into the utricle, before I finally eradicated the offending bacterial invasion, in some cases.

ABSTRACT—TRAUMATIC ANEURISM OF THE TEMPORAL ARTERY.

By J. Shelton Horsley, M. D., Richmond, Va.

MR. HORSLEY called attention to the infrequency of traumatic aneurism which differs from the so-called idiopathic aneurism of diseased arteries. A traumatic aneurism is caused by a trauma in a previously healthy vessel, and really results from the organization of a hematoma which is produced by this injury. Usually when an artery is injured by a trauma, the patient either

(Read at a meeting of the Southern Surgical Association, Dec. 11, 12 and 13, 1916).

bleeds to death or the vessel is occluded by the pressure of the thrombus. When this does not occur, a traumatic aneurism may result from a pocket or lake that occurs in the clot where the artery is injured. The conditions which promote this may consist of some deficiency in the elements of the blood or tissues that produce prompt clotting, or may be mechanical and result from a flap of intima being detached, or by pressure of the hematoma causing an eddy in the blood at this point. The temporal artery is very superficial, and with its terminal branch, the anterior temporal, is much exposed to trauma. It has but little protection by soft tissue either above it or below it. Since 1896, a rather thorough search of literature has shown only five cases of traumatic aneurism of the temporal artery and its branches. Dr. Horsley gives brief abstracts of these five cases, and reports two cases of his own. In neither of his cases was there any evidence of syphilis or other disease of the arteries. One was in a youth 19 years of age, who received an injury in the right temporal region while playing basket-ball. This was immediately followed by a large hematoma which was partially absorbed, but resulted in a small pulsating aneurism about 1-2 inch in diameter. Operation was done seven months after the injury under local anesthetic, the sac being excised after the arteries were ligated. The second case was in a young boy, 9 years of age, with a somewhat similar history, being injured while wrestling. This aneurism formed in the temporal artery just above the zygoma. It was excised under local anesthetic. There was no recurrence in either case.

THE NECESSITY OF GRAPHIC ILLUSTRATION OF SANITARY CONDITIONS IN A COMMUNITY.

By M. R. Mobley, M. D.,
Florence, S. C.

I ASSUMED charge of the Health Department of Florence, South Carolina, during the latter part of July, 1916, just after the memorable storm of that month; during which time there was twenty-three and one-quarter inches rain fall within a period of thirty-six hours.

As a result of this great amount of rain, with the accompanying wind storm, the city was left in an extremely unsanitary condition. Owing to the lack of a complete under ground system of drainage, water stood in all the low places, on the streets, in cellars, and in thousands of tin cans, tubs, and buckets. The ground was so saturated with water that there was practically little drainage thru the soil. This stagnant water afforded a breeding place for countless numbers of mosquitoes; with the resulting danger of malaria from this source.

At this time only about forty per cent. of the population of Florence were using City water, although City water was available to approximately sixty-five per cent. of the total population. Practically all the wells in the city were filled with water to the surface of the ground, and in a great many instances the wells were overflowing. A test of the well water for gas forming bacillae was not necessary, as you could see gas bubbles rising to the surface of the water. Through surface drainage the wells became reservoirs of all the filth on

Read before the Pee Dee Medical Society, Florence, S. C., December, 1916.

the premises: thereby, increasing the danger of Typhoid, Dysentery, Cholera-Infantum, and other water borne diseases.

A number of our sanitary surface closets were in an extremely unsanitary condition, some were without cans, and in some instances actual soil pollution was being carried on; thereby, doubly increasing the danger from drinking surface water.

In North Florence, the main negro district, where there is no system of sewers, or under-ground drainage, the stagnant water was so deep in some places that the negro residents had to wade to their homes.

This stagnant water, together with decaying organic matter, produced numerous disagreeable odors.

At a glance, one would naturally see that the condition which I have described above needed an immediate remedy in order to prevent the occurrence of an epidemic of some contagious disease. City Council immediately appropriated sufficient funds to place the city water for drinking purposes within reach of practically the entire population. Over each spigot was placed a placard, bearing a warning against drinking well or pump water. In this manner we eliminated the largest single factor that might be productive of an epidemic.

We secured an oil wagon, and several barrels of unslacked lime, and made a house to house canvass of the entire city, oiling all wells, stagnant pools, ditches, in fact, any body of water. All tin cans or buckets that could hold water were turned over. All low lying places were limed thoroughly. In each instance, we gave the owner of the premises, explicit instructions as to how to keep their places in a sanitary condition.

All of the city departments cooperated in trying to relieve the distressing conditions at the earliest possible moment; the Street department facilitated the work greatly by draining off all stagnant pools where it was possible to do so.

At this time the Department had no record of conditions from which we could plan a satisfactory method of operation. There was no complete record of the number, location, and condition of surface toilets; thus leaving us at a loss as to where to expect the greatest degree of danger. We had no record of existing sanitary closets where the property owners failed to install the sanitary closet as prescribed by law.

We had no knowledge of the number, location, or condition of wells, pumps or stables.

Our record of existing contagious diseases was incomplete.

A study of the fore-going conditions, with a complete lack of records, made it evident that we would have to make a sanitary survey of the entire city, covering the following points:

Date.....
Street..... Number.....
Owner .....
Occupant .....
Race .....
Children of school age...M....F....
Boarders or Roomers... M....F....
Other Occupants ..... M....F....

CONTAGIOUS DISEASES.

Typhoid
Infantile Paralysis
Small-Pox
Dyphtheria
Measles
Pneumonia
Tuberculosis
Pellagra
Meningitis
Scarlet Fever
Whooping Cough
Water Supply .....

City Water Available.....
Kitchen Slop Disposal .....
Sewer Conections .....
Sewerage Available .....
Horses ..... Cows .....
Stables, Distance from House.....
Surface Closets .....
Distance from House .....
Yard Drainage .....
Milk Supply .....

Remarks:

The survey had to be completed, and records tabulated before we could plan a satisfactory method of procedure.

A recapitulation of the survey shows the following:

White Population—4,991.
Colored Population—4,115.
Total Population—9,106.
White children of school age—1,077.
Colored children of school age—976.
Wells—508.
Pumps—288.
Horses—322.
Cows—148.
Stables—382.
Surface Closets—1,441.
Wells and Pumps where city water is available—209.
Surface Closets where the sewerage is available—450.

Such a large number of surface wells and closets must constitute an ever ready source of grave danger. Our survey showed 209 surface wells and 450 surface closets were being maintained where City Water and sewerage were available. Using red pins we denoted on a map of the city the location of each surface closet within the city. This Map graphically illustrates the number and location of surface closets in any portion of the city. When we succeeded in having the use of a surface closet discontinued by the installation of sewerage, we denote the same by removing a red pin and inserting in its place a white pin. It is my purpose at a later date to denote the location of surface wells in the city by using a map with different colored pins.

The survey enabled us to locate all stables in the city. This information will be of great value in the spring when we begin our campaign against the fly, by assisting us to readily inspect all stables and instruct property owners as to their proper care.

With the above information, and with the co-operation of the physicians we have obtained a complete record of all contagious diseases existing within the city. Upon the reporting of a new case of any contagious disease, we denote the location of the same by inserting a specifically colored pin in the Map of Contagious Diseases of the City. We denote the location of recovered cases by the use of ring pins of the same color.

By comparison of the map of Contagious Diseases and the map of Closets and Wells, we can see the general conditions surrounding the contagious disease in question, and can properly instruct the surrounding community as to the best method of protection.

It is especially gratifying to the Health Department to be able to report that since the occurrence of the storm we have had only seven cases of Typhoid Fever originating within the city, practically all of which have been in those areas where surface closets and wells are most numerous.

ABSTRACT — CANCER OF MAMMARY TISSUE MISPLACED IN AXILLA.

By J. Shelton Horsley, M. D.,
Richmond, Va.

MR. HORSLEY called attention to the fact that primary malignant epithelial growths in the axilla are rare. The growths usually found are metastatic through the lymphatics. He reports a case in an unmarried lady, forty-six years of age, who had two sisters with cancer. This patient noticed a growth in the right axilla which became quite painful. There was no evidence of any primary lesion elsewhere. A block dissection of the axilla was made. An examination of the tissue removed showed it to be malignant, and Dr. Bloodgood after pathological examination reported that it was cancer of mammary tissue. The symptoms of pain which are unusual in early cancer were probably due to pressure on the intercosto-humeral nerve. There seemed to be a tendency for the pain to become worse about every three or four weeks. Probably the presence of early pain and of increased pain during menstruation may be significant symptoms. Three years and four months after the operation, the patient was examined and found to be entirely free from recurrence.

(Read at a meeting of the Southern Surgical Association, Dec. 11, 12 and 13, 1916).

THE NEED OF AND HOW TO OBTAIN A HOSPITAL IN EVERY COUNTY IN SOUTH CAROLINA.

By L. H. Jennings, M. D.,
Bishopville, S. C.

IN this progressive age it behooves every community large or small, be it ever so rural to have a modern hospital within an hour's reach of every physician. 'Tis absolutely essential to have such conveniences to enable us to do our work as efficiently as any one, other things being equal. Impossible to cope or compete with physicians in our neighboring towns unless we have these things, we can't do our duty to our patients nor justice to ourselves if we are not in a position to give them the latest and best in the Twentieth Century.

We should be the equal of any man under similar or same circumstances, but how can we have the latest thought in theory and experience if we haven't the equipment? We may be trained in the best colleges, universities, medical schools and hospitals in the country and be almost helpless when dumped into some rural district without any equipment except what the Supreme being so benevolently bestowed upon us. Some will say adapt yourself to the surroundings, improvise something and go ahead but what will the result be? A deformity and perhaps a damage suit.

There are many poor, ignorant, unfortunate, and superstitious creatures suffering from the many ills flesh is heir to, many of these, if they had the means are too ignorant and superstitious to go off for treatment, but if they had an institution in their midst it would not be such a difficult task to convince them of its benefit.

Read by title before the South Carolina Medical Association, April, 1916.

Less than a year ago we established a small but modern hospital in our little town of about 2500 people. Since then we have treated more than a hundred patients with only five deaths, two typhoid, one toxemia, one perineal abscess and one from a fractured skull. We took any and all classes and cases, made no exceptions. Twenty-six of these major operations, 44 minor and the remainder medical. Not from an egotistical standpoint I mention this but only to show our brother physicians in the sparsely settled communities what can be done if we only try. The size and density of the population has nothing whatever to do with the results.

After agitating a hospital for a long time, planning, scheming, etc., without results we fell upon the following plan. Prevailing upon our legislative delegation to transfer a one-half mill which had been previously levied to care for the paupers and indigents of the county, to the maintenance of a hospital, in lieu of this fund we agreed to treat free of charge all paupers, convicts on the county chaingang and prisoners in jail.

This one-half mill amounts to about $1800 per annum. However this isn't sufficient to bear all expenses so the balance of the expenses we manage to collect from our pay patients. When this act became a law there was on hand about $1000. With this we bought our furniture, equipment, etc. We rented a residence in the edge of town which can accommodate about 15 patients. The town furnishes us water and lights gratis, therefore we treat their paupers and prisoners free.

To keep this fund and the management out of politics and out of the hands of unscrupulous persons we inserted a clause in the act which provides for a committee of three who shall be selected by the Civic League consisting of two ladies and one gentleman. Their duties are to investigate all applicants and to issue certificates of admission for free care and treatment to the worthy only. The management is vested in the County Medical Society. So far it has worked admirably, practically every physician in the county is connected with it. We also have 15 of the best business and most influential men in the community as an advisory board of directors.

Gentlemen, I have only brought this important subject to your attention with the sincere hope that it may be the means of other counties doing likewise for the sake of suffering humanity.

HEMORRHAGE OF THE NEWLY BORN; WITH REPORT OF A CASE.

By H. L. Shaw, M. D.,
Fountain Inn, S. C.

SPONTANEOUS Hemorrhages in the newly born are very uncommon. In 5225 births in the Boston Lying In Asylum, Townsend reports 32 cases of hemorrhage or sixtenths per cent. The exact cause of these hemorrhages is not known. "It is thought to be due to some changes in the blood or in the blood vessels or both, whereby the vessels are no longer able to hold their contents." The prognosis is grave. "Of 709 cases collected by Townsend the mortality was 79 per cent., no observer has ever seen more than one-third of his cases recover." This I quote from Holt. Fortunately the disease is of such rare occurrence that one of limited experience like myself has no exact

Read by title before the South Carolina Medical Association, Charleston, S. C., April, 1916.

way of arriving at any definite conclusion as to cause, prognosis, or treatment, and it is only with the hope of helping some one that I mention a recent experience of mine. It is with the approval of Dr. W. B. Furman, of Owings, S. C., that I am able to report the following case: On the 25th day of December, 1915, a baby girl was born to apparently healthy parents, this being the second child, there was no history of trouble with the first child. Dr. Furman who attended the mother when the child was born says the labor was normal in every particular, though the mother was very much run down at the time. As stated above the child was born on the 25th. On the 26th at 12 Meridian the infant had a hemorrhage from the Gastro-Intestinal tract, there were twelve napkins removed all blood stained in the first eleven hours after hemorrhages began. At this time Adrenalin was begun, one-fourth minim being given every two hours by the mouth for eighteen hours, the dose of adrenalin was then increased to one-half minim every two hours for eighteen hours, during which time there had been twenty-four napkins removed all blood stained. It was then that we began the use of Pituitrin in one minim doses every four hours hypodermically. This was continued for twenty-four hours during which time the infant had only four hemorrhages and three fecal movements, the first fecal movements since birth. We then increased the dose of Pituitrin to two minims and lengthened the interval between doses to eight hours, this was continued for twenty-four hours, after which time all medication was stopped. The child had only four hemorrhages after Pituitrin was begun. The little patient had lost a great deal of blood, seemed almost bloodless, but soon regained her color and continues to do well, when three months old she weighed fourteen pounds.

SHOULD THE TONSILS BE REMOVED:

By W. Peyre Porcher, M. D.,
Charleston, S. C.

A DISCUSSION of this subject would hardly be warrantable were it not for the fact that such a diversity of opinion is held concerning it. This is shown by the great number of articles which have apeared in the journals in the recent past. But a short time ago one of our most noted clinical research men put the question to me. Do you know what becomes of your tonsillectomy cases? He implied if he did not actually assert that the synechial adhesions and general mutilations of the parts sometimes left the patient in a worse condition than he was before. One writer (N. Y. Medical Journal, Dec. 15th, 1913), says:

The surgery of the Faucial Tonsil As It Relates to the Functions of the Tongue and Soft Palate in the Production of the Voice. Radical surgery of the tonsils must necessarily result in a greater or less distortion of the pharyngeal structures and, therefore, in an injury to the voice. The normal tonsil or the one in a healthy condition and of normal or approximately normal dimensions was not only beneficial to the voice, but it was absolutely essential to the attainment of the highest artistic results in singing and speaking, but just as the normal tonsil was helpful in voice production the abnormal tonsil might be altogether prejudicial, and it might be prejudicial to such an extent as to

Read before the South Carolina Medical Association, Charleston, April, 1916.

make some kind of tonsillar surgery absolutely imperative. Before doing radical tonsillar surgery it seemed only reasonable to demand a thorough differential diagnosis. It was easier to enucleate than it was to investigate and especially was this true with their improved technic, in the perfection of which they had spent so much valuable time. Future years would find them trying, not how to enucleate, but how to avoid enucleation.

The extracapsular tonsillectomized pharynx was always necessarily a damaged pharynx, and the operation ought to be done only when absolutely necessary, and when the damage to the pharynx and to the individual threatened to become greater by leaving it undone. In the majority of instances the only good reason for doing an extracapsular tonsillectomy was the difficulty of doing an intracapsular tonsillectomy, which consisted in a careful dissection of the gland from within its pocket in the intrapharyngeal aponeurosis. This was a difficult but not impossible operation, and the fact that some tonsillar tissue might remain adherent to the capsule was no objection to it because when the operation -was properly performed good drainage, the sine qua non of every operation, would be thoroughly established.

The same writer in an article on The Conservative Treatment of The Tonsils, N. Y. Medical Journal, Mar. 11th, 1916, thus summarizes:

Summary and Conclusions.

In its normal state the tonsil is not a menace, but a probable protection, and its presence is helpful in both phonation and articulation.

The fact that we do not know the systemic and mechanical functions of the tonsil is an argument in favor of conservatism rather than radicalism in our treatment.

The enucleation of the tonsil is the simplest and most expeditious way of dealing with it, but that it is the best way is always a matter of opinion and a question for careful consideration in each case. It is easier to remove a tonsil than it is to know whether or not it should be removed, and the very simplicity of the operation and its apparent freedom from untoward results make the temptation all the greater to do it rather than resort to the more difficult but less radical and probably better methods.

In our clinics the temptation to remove tonsils in a somewhat wholesale manner is almost irresistible, but the practice is none the less reprehensible. It is obvious that dispensary cases should have the same careful treatment and the same consideration that are given to the most deserving private cases, and lack of time in our dispensary work is not a good excuse for ill advised and careless operations. the man who tonsillectomizes a dozen or fifteen patients in a single afternoon had better spend his afternoons in the abattoir.

However, after all is said and done against radicalism in tonsillar surgery, the fact remains that in certain selected cases there is nothing we can do that gives such brilliant results as the removal of the tonsils and adenoids, and in well selected cases there can be no objection to the operation, provided always that it is carefully performed. The very brilliancy of these results, however, has an element of danger in that it leads us to make the radical operation the rule, rather than the exception which I think it ought to be, and, as I have said in a previous communication, the tendency of the future will be to find out, not how to operate, but how not to operate, or at least how to operate in the most conservative manner.

1627 Walnut Street.

In order to arrive at a conclusion in regard to this matter it is necessary that we should bear in mind the anatomical situation and to remember that the tonsil as a visible gland does not exist, that as soon as it becomes sufficienty enlarged to project itself above the pillars of the fauces it becomes a pathological organ and requires removal. We must remember also that in the first act of deglutition the laryngeal box is brought up to the epiglottis and the epiglottis is not forced don upon the rima glottidis as is so commonly believed. The epiglottis is closed and a straight canal when the windpipe is lifted up the glottis is stationary and therefore is left for the passage of fluids, solids, etc., down into the gullet. The canal is bounded on either side by the anterior and posterior pillars of the fauces. Posteriorly by the tongue and all controlled by the constrictor muscles of the pharynx. Between the pillars of the pharynx normally there should be an open space, but the capsule of the tonsil is found there with numerous follicles or crypts and herein lies the bone of contention about which there has been so much discussion and so much has been written. Naturally as the bolus of fluid or solid is grasped by the pillars of the fauces the tonsils are squeezed by the constrictor action of the muscles and the crypts mechanically emptied of their contents. Of course it is possible that certain bacteria may be absorbed at the same time. When the tonsils become hypertrophied so as to show above the pillars of the fauces they must not only interfere with deglutition phonation and respiration but they are then foreign bodies and disease carriers.

Much diversity of opinion is held concerning the true functions of the tonsil. It is generally conceded that they absorb bacteria and exude lecocytes, that is the leucocytes force their way through the lymphoid tissue into the blood vessels. All this appears to be much debated and debatable question. Be that as it may, no writer has yet attempted to prove that the removal of the tonsils was followed by any serious alterations of the normal functions of the body. On the contrary from a careful study of the literature which I have been able to review nothing but good results have come from the removal of hypertrophied tonsils. The number of diseases and abnormal conditions following tonsillitis has increased greatly in recent years. In the New York Medical Journal for April 15th, 1916, occurs an article on "Pyelocystitis and Metastatic Abscess Following Tonsillitis," by H. Brooker Mills, of Philadelphia, and Geo. A. Sowell, of Philadelphia.

As carriers of disease germs quite a number of articles have appeared notably one on "The Removal of Tonsils and Adenoids in Diphtheria Carriers," by S. A. Frieberg of Chicago. See Journal A. M. A., Mar. 11th, 1916.

As a factor in the production of Rheumatism, Tuberculosis, and Diphtheria with perhaps many other air borne diseases, the tonsils can hardly be held blameless. Even when no hypertrophy exists, or in other words, where there is a hollow space between the pillars of the fauces, frequently a cheezy exudate will occur which is exceedingly offensive and is often mistaken from chronic nasal catarrh. Kaolin dusted over the tonsils, has been highly extolled for its capacity to remove disease germs but its action is only mechanical and does not reach those germs deep down in the follicles, and total removal has been found to

be the only method for infected tonsils.

The question therefore of the advisability of total or partial ablation or complete tonsillectomy must depend upon whether the damage resulting from tonsillectomy exceeds or is greater than the risk incurred by leaving them. According to the experience of the writer this question hardly bears consideration. The visible tonsil being a foreign body should be reduced with the electric cautery or totally ablated with the Guillotine or wire snare. A word now as to the best method of removal.

In former years Makenzie's tonsillotome was almost universally used for partial ablation. Subsequently many forms of wire snares were invented by means of which the entire tonsil and capsule was said to be scouped out of its bed. All adhesions having been first broken down and the organ pulled well forward with a specially devised tenaculum.

I will not attempt to describe all the innumerable modifications of snares, scissors, forceps, etc., devised for the accomplishment of this operation. Suffice it to say that the tonsillotome has finally come back into its own. In the Sluder operation the tonsil is first pushed well forward from without. The tonsillotome is then passed behind the ramus of the jaw and the tonsil is grasped, and with the finger in the mouth, the tonsil is still further engaged and the blade shoved home. In this operation the organ is not only rapidly removed, but the surrounding structures are not lacerated and the liability to hemorrhage is not so great when partially blunt instrument is used. Of course in the so-called submerged tonsil or where the organ is embedded behind the anterior pillar as sometimes occurs it must first be carefully lifted out of its bed, but in ordinary cases it would seem to the writer that the Sluber method will in the great majority of cases be the operation of choice.

THE NOSE.

By Newton T. Clark, M. D.,
Spartanburg, S. C.

THE true interpretation of life means for mankind a good nose. Without this he is at a loss to confront and compete with the exigencies that he must encounter. They teach him how to appreciate some of the more delicate and finer things because the nose is able to detect a 1-3000 of a grain of many things. No other organ can do that without aid. The medical profession has been prone to ignore and prone to neglect the complaints of the nose. Many of the troubles of man are complicated or pepetuated by a nose that refuses to do its work in the way nature has intended it to do it.

The nose teaches us right much about the evolution of mankind. In the fish we see the single chambered nose. In the hawk we find the double chambered nose. In man the three chambered nose. In the dog we see the three chambered but they are so arranged that when he puts his nose to the ground he can have them in line. Think for a minute how important the atenae of the ant is. It has three bulbs and each bulb a noted characteristic. One with which it recognizes its friends. One with which it recognizes its food. One with which it recognizes its enemies. If you cut off the friend bulb it fights all ants. If you cut off the enemy bulb it makes friends of all

Read before the Spartanburg County Medical Society, Nov. 24, 1916.

its companions. If you cut off the food bulb it refuses food and ultimately dies.

The nose forms a very important foundation of man's welfare and existence. It promotes and stableizes his health. It helps to place him in society; for it is said that if Cleopatra's nose had been one-half inch longer or shorter the history of the world would read differently to-day. It helps him to live in different climates and in different atmospheres, foul and otherwise. The hog and the mole go farther and use their nose to lift debris from their food and even plough the earth. The nose protects the lungs, warms and filters the air, acts as a guide to our stomachs and assists in our hearing and when it is robbed of these virtues then it is diseased and no longer helps to maintain and preserve the body as it should. We must not forget the fact that the Japanese have developed the nose and do some very accurate things skilled and detective-like in the art of smelling.

First of all the divine creator has devised a two-sided nose so when one side becomes diseased and non-commissioned the other side compensates as a duty but as a necessity and as equally unvalued.

Noses help to make history because they help to make men. A man without a nose is hardly any man. History would treat the epochs of life differently if noses had been treated correctly from time immemorial.

The writer of this article would ask you to follow him in a few cases that he has observed in the last four months; noting if you please the particular instances. We have noted the functions of good noses and how it can be developed provided they are normal; but lets follow the cases of abnormality and note the effects on the anatomy and functions of the adjacent and subadjacent organs. The eye a nearby neighbor, the ear a distant but dependent neighbor, and so the tonsils and pharynx.

A young man came to my office having had much trouble with his eyes. He was near-sighted and his eye on left was astigmatic and he suffered with headaches and yet he had been fitted with glasses many times for a number of years. On the left side of the septum was a septal spur. I removed this spur and now he goes without headaches and can see.

A physician referred a case to the speaker in whom he suspected a disease of the antrum. Upon examination I found no trouble there and his eyes were giving him much pain at the time. He had already visited two dentists and found no relief; and so I sent him to the third who removed an old filling and told him he would be alright. But his trouble continued and by and by in two months an old piece of tooth was removed and he got well. No more glasses and no more pain.

Another case came and claimed trouble with her eye and I found it astigmatic and found a spur on the nasal septum. Her other eye was perfect. Another case came with turbinate trouble and by an operation she too was cured.

The writer believes there is a mechanical reason for much of the eye trouble and not so much of reflex symptoms as is spoken of in a few books. Being two meridians of the eye required to be true we would suppose if some pressure should come to bear on the socket and in this way change a meridian then we would have a case of astigmatism.

Think then how much pressure should be brought to bear on the wel-

fare of the nose. An imperfect nose may cause many troubles which we will try to enumerate. It may cause trouble with the eye reflex or mechanical or even disease may travel to that organ through the ducts. The ears may suffer as disease may travel to it or may cause trouble in the tube as deafness, etc. It may cause a leaking down upon the vocal cords and set up an inflammation and hoarseness. So many perforations of the ear, or many cases of deafness or hoarseness or a bad eye cannot be helped until a nasal spur is removed and a good nose is made. A man needs and must have a good nose to get the proper air in the lungs and the proper oxygen in the system.

ABSTRACTS

SURGICAL EXPERIENCES WITH ENCAPSULATED EMPYEMA AND ABSCESS OF THE LUNG — A PLEA FOR EXPLORATORY THORACTOMY.

By Astley P. C. Ashhurst,, M. D.
Philadelphia, Pa.

The author brings convincing evidence to show:

1.)
2.) as summary, p. 210.
3.)
4.)

Typical cases, well illustrated, are presented in the International Clinics for December exhibiting the difficulties of recognizing and reaching pus within the pleura even when exploratory puncture is resorted to, while it is made plain how much can usually be obtained by surgical means. Refusal to operate when the needle fails to reveal pus at the time set for operation even though pus was previously found is bad surgery. The surgical technique is carefully described. Local anesthesia is preferred, the intercostal nerves above and below the rib to be resected being blocked with an injection of the anesthetic fluid, novacain or eucain being preferred. For abscess of the lung thoracotomy is preferred to the production of a therapeutic pneumothorax by Forlanini's method as the former gives better opportunity for locating and draining the abscess.

ACUTE SYPHILITIC MENINGITIS.

By Boris Bronstein, M. D.,
Odessa, Russia.

Bronstein considers that the term acute syphilitic meningitis should be more particularly applied to acute meningeal phenomena of the secondary period, sometimes preceding, but more frequently accompanying the cutaneous manifestations of this period. The pathology is essentially a meningovascularitis with hypersecretion of the cerebrospinal fluid. Prodromal symptoms, such as headache and insomnia, may or may not occur. Acute syphilitic meningitis at its height, as Bronstein says in the December International Clinics, presents the clinical picture of the tubercular form, differing from the latter by the indistinctness of the symptoms, such as contractures and stiffness of the neck, and by the absence of any marked disturbance of the pulse and respiration. In the luetic form fever is apt to be absent and there may be remissions and relapses. Lumbar puncture reveals a considerable hypertension of the cerebrospinal fluid, albumin in quantity, and a marked lymphocytosis with plasmozellen. The cerebrospinal fluid may yield a positive Wasserman even when the blood serum is negative. Other manifestations of syphillis are

to be looked for. The immediate prognosis is rarely fatal but the ultimate prognosis should be reserved. Prophylactic treatment is recommended whenever the cerebrospinal fluid shows a lymphocytosis, even when all meningeal symptoms are wanting. The treatment consists in frequently repeated removal of the cerebrospinal fluid in considerable amount, combined with intravenous injection of cyanide of mercury and introspinal injections of colloidal mercury. Neo-Salvarsan or salvarsan have a much more rapid action, but must be prudently handled in neurologic lesions of syphilis.

A CLINICAL CONSIDERATION OF MIGRAINE.

By John A. Litchy, M. Ph., M. D., Pittsburgh, Pa.

Migraine is considered by the author as the most frequent headache, occurring in 700 of his 15,000 patients sick from all causes. He believes that the so-called acidosis in children may often be a forerunner of a well established sick headache habit. The interesting relation between migraine and epilepsy deserve further study. Among the author's 15,000 patients epilepsy occurred in 7, and both migraine and epilepsy in 70. Auerbach's theory which attributes migraine to an actual disproportion between skull-capacity and volume of brain, needs further proof. In the International Clinics for December Dr. Litchy shows that the diagnosis is easy when there are headaches which are unilateral, periodical and hereditary, but when only one or two of these symptoms are present, or when there is only a periodicity of some of the minor symptoms or possibly of the aurae, the diagnosis may be difficult. Migraine is frequently mistaken for pelvic disease, for acidosis or cyclical vomiting in children, and organic disease, when some of the aurae are present. The psychasthenic and the gastric symptoms frequently lead to confusion in diagnosis. While the underlying causes of migraine are vague and furnish little light as to treatment, much can be done to ameliorate the symptoms by proper handling of the exciting causes that aggravate the patient's general condition and precipitate the attacks. Most thorough investigation and careful individualization are indicated. Systematic administration of the bromide salts and avoidance of undue fatigue are especially recommended.

CHRONIC DUODENAL INDIGESTION IN CHILDREN

By John Foote, M. D., Washington, D. C.

This condition is said to occur most frequently in children after the first year, and especially in those who have suffered from dietetic errors, usually with antecedent contagious diseases, or from prolonged intestinal infections, and this is fully covered by Foote in the December International Clinics. This form of indigestion seems to be accompanied by deficiency or pancreatic ferments, especially lipase. A mild duodenitis, which either passes up the pancreatic duct, or diminished hormone formation, seems responsible for the condition. Diminished bile production may also be a factor. Anemia, loss of weight and mental undevelopment occur. Large pendulous abdomen are common. Bottle feeding has been employed. Fever may be encountered, vomiting almost never. The number of daily stools varies from 3 to 12. They are thin, contain some mucus and flakes of whitish material and have a very foul odor. They give

an acid reaction and microscopically contain not only large quantities of fat soaps, but also a considerable amount of neutral fat but rarely starch granules. It is to be differentiated from mesenteric tuberculosis and acute duodenal indigestion. The treatment consists in reducing the food elements which have proven indigestible, namely, the fat, and stimulating enzyme production by the administration of hydrochloric acid and pancreatic ferments.

INDUSTRIAL MEDICINE AND SURGERY.

H. E. Mock, Chicago (Journal A. M. A., Jan. 6, 1917), says the conservation of life by the prevention of disease and accidents among employes, the basic principle underlying all forms of industrial medicine, is the greatest influence for socialization in our country at present, and the company surgeon of today and the future has the opportunity of extending medical science into this vast field of endeavor. Heretofore, owing to ignorance and lack of interest and provision, this field of medicine has been considered narrow. But when a company surgeon realizes that for greater efficiency an employer has the right to demand a healthful, physically mental and normal force, and the employee is justified in demanding healthful, sanitary working conditions, and that business principles justify both these demands, and when he posesses a sufficient enthusiasm and knowledge to master the details, his value is unlimited. The industry with which the writer is connected has gradually extended its medical staff and equipment from a four-room office with one doctor and two nurses in 1909 to an eighteen-room office with seven doctors, twelve nurses and two dentists in 1916. The doctors spend part of the time every day in the work so that there is always some one in charge of the company office, while many of the very best of the company surgeons devote their whole time to the industries employing them. As a rule, the greatest corporations find they can get better trained surgeons and physicians if they require them to give only a part of their time to the work. The work of the medical staff and the preventive surgery methods are outlined by Mock, who describes the first aid equipment, and mentions especialy the universal use of the tincture of iodin introduced by him as the best antiseptic for first aid in injuries. The examination of employees as a preventive measure is also noticed at some length, and the scope of the work described. The industrial visiting nurse has much to do with the investigation of this latter problem, and no plan of medical supervision is complete without her assistance. The industrial dentist is also doing more and more in the promotion of health efficiency, and the company surgeon who takes advantage of his opportunities is destined to better his abilities in medicine and become also a sociologist and economist whose influence extends through the whole community.

FACTORY SUPERVISION.

The experience of the health department at the Norton Company and the Norton Grinding Co., Worcester, Mass., in regard to the medical supervision of its employees is reported by W. Irving Clark, Jr., (Journal A. M. A., Jan. 6, 1917). The best time to examine any employee, he says, is before he is hired, thus eliminating any man totally unfit for the work. Rejections, however, should be made only when necessary, and the examination cannot be too complete. They arbitrarily reject all applicants over

45 years of age, all men with one eye or serious eye defects, all cases of contagious diseases including, of course, tuberculosis, any with more than second degree hernia, cases of uncompensated heart disease, varicose ulcer, fourth and fifth degree flatfoot giving trouble, and marked hypertension. The list of defects not barring from employment includes but few employees carrying them. The average workman though with numerous slight defects is perfectly capable. There are, of course, some departments where restrictions must be higher than others and for these they try to get men as absolutely fit as possible. The candidate is told of his defect and wherever possible is instructed how to get rid of it. Several of them have these instructions. They find that the average workman does not object to physical examination, and most of them are pleased to have it made on account of the information it gives them and acquaintance with the doctor to whom they are going to apply afterward in case of sickness or accident, and the most complete examination does not take more than ten minutes, provided no laboratory tests are required. Periodic examinations tend to keep the man in good condition and as it is impossible to find men absolutely without defects, it is possible to place men in departments where they run the least risk and are most efficient. An examination each time a man is transferred prevents the posibility of unfit assignments. All men having any sickness or accident apply to the hospital, and are there examined. The number of rejections altogether is very small. All employees who are injured receive treatment at once in case the accident is reported, and the loss of time from injuries has been reduced to the minimum. They had no case of sepsis, though they cannot absolutely say they have excluded all infection. The routine treatment of accidents is to first wash the wound with commercial gasoline, using it like water, and scrubbing with sterile gauze. Following this at once, tincture of iodin, U. S. P., is poured into the wound and over the skin, allowed to dry and a sterile gauze dressing applied. Iodin to be 100 per cent. efficient as an antiseptic must be used within thirty minutes after receipt of the injury. The full power of the hospital for good in these cases has never been completely brought out. During the month of April they treated 474 accidents, but one of which was severe enough to draw compensation. Its effect is to cure so rapidly that its full faculties for after-treatment have not been called on. A very little inducement brings every case, no matter how light, to the shop hospital. The treatment for sickness is prophylactic, not curative. The aim is to diagnose and see that the man gets immediate attention from his family physician or a specialist as indicated. If a man has a temperature of 100.4 he is not allowed to continue or return to work, and a follow-up system is in use for various obvious reasons.

CHRONIC MIDDLE EAR SUPPURATION.

G. W. Mackenzie, Philadelphia (Journal A. M. A., Jan. 6, 1917). enumerates the principle points to be given attention in working for the prevention of chronic middle ear diseases. The diagnosis must be most thorough and include every feature of the case. There is no disease that requires a more exhaustive examination. Laboratory methods in a direct physical, mathematical sort of way are required. The prevention of the chronic form of middle ear disease is

possible only when we are able to arrest the suppurative form in its acute stage. How long an ear may discharge before the condition is called chronic is difficult to say. If it continues for more than six months in spite of careful, conservative treatment for two months or more, Mackenzie would consider it as chronic. The local factors that tend to make it so are adhesive bands in the middle ear spaces left there after previous attacks of acute secretary catarrh, narrowing of the eustachian tube anywhere along its course, and anything whatever that prevents the free discharge of pus is a factor of importance. The normal route for middle ear discharge is down the eustachian tube and the obstruction to this causes the perforation of the drum and discharge externally. The tube may be obstructed by adenoids in the mouth. A frequent location for obstruction is the upper end of the tube. When the adhesive bands of the middle ear, or in the mouth, tend to close off the antrum, the probability of mastoditis is increased. One thing observed and emphasized is the frequency with which local inflammatory swellings clear up after a simple mastoid operation. This, however, is not to be urged until other more simple methods have been tried and failed, nor should it be unduly postponed. Nasal obstruction seems perhaps farfetched as a cause of chronicity of middle ear suppuration. Experience teaches us, however, that the correction of nasal obstruction acts beneficially. A common cause for delayed recovery is found in the so-called chronic infections, tuberculosis and syphillis, especially the former. A large proportion of cases in infancy are tuberculous, perhaps due to a direct infection or some other cause. Tuberculosis anywhere in the body acts detrimentally to the general health and prevents or hinders prompt healing of the ear disease. Care of the ear in these cases will probably fail. As is well known, operative treatment of tuberculous conditions is liable to be followed by tuberculous meningitis, especially when the patient's general health is ignored. Much less is known concerning syphilis of the middle ear, and fortunately the condition is rare. In a general way the same remarks apply to tuberculosis. Diabetes is prone to delay if indeed it does not cause the trouble. Only general causes that may contribute to chronicity need be mentioned. General lack of vitality complications by way of extension to neighboring parts, and susceptibility to special organisms should be considered in this regard. Mackenzie has not much confidence in vaccine treatment for this condition, though theoretically it should be ideal. He has not yet given up their use in spite of many failures.

OTITIS MEDIA.

N. H. Pierce, Chicago (Journal A. M. A., Jan. 6, 1917), says chronic otitis media is rather easily cured in a large number of cases if proper methods are adopted, but it requires more patience and self-abnegation, one might say, than most men have, to try out the proper method. The proper methods depends on the location in the middle ear, whether in the tube, the cavum, or the mastoid portion; on the stratum that is, whether it is relatively superficial, the affection mostly confined to epithelial structures, or the tissue under the epithelial, or whether it is in the peritosteal layer in the bone. The treatment also depends on the character of the pathologic process, whether it is due to a simple pus-producing micro-organism, or one of the various forms of the coci, and whether it occurs as the result of

diphtheria or scarlet fever, tuberculosis or syphilis. Tubal disease is rarely purulent; purulency usually means a disease of the bone. Purulent discharge means involvement of the tubal cells, a series separate from the mastoid system, and calls for operative intervention, not the radical operation, but one outside the scope of the paper. The purulent mucus comes always from the tissues above the periosteal layer of the mucoperiasteum. The mucus from the cavum is exceedingly scant. The perforations is the tympanic membrane in tubal disease are practically always in the anterior portion of the pars tensa, are usually large in chronic cases, central and never marginal in uncomplicated tubal diseases. In centrifuging the discharge we find no evidence of bone cells or bone chips. This discharge may be of long duration with occasional exacerbations. The treatment should be directed to the tube. Beside removing the associated pathologic conditions in the nose and postnasal space, we should get rid of the hyperlastic tissue in the tube itself. This can be done by application to the tube by means of the eustachian catheter application, Weber-Liel catheter or syringe. The tube can be syringed out, the fluid coming out through the perforations in the drum, and one should therefore be careful in these cases to have a large perforation either present or made, and the irrigating fluid should be non-irritating. A normal salt solution is ideal. Silver nitrate may be applied with a small wire, one strand wound round another, with a small piece of cotton on the end immersed in the silver solution and carried to the cavum. The hard rubber catheter should be employed and one should begin with a low percentage, 2.5 per cent., and increase according to the resistance of the patient to 10 per cent. When uncomplicated by diabetes, syphilis, etc., or when the tubal cells are not involved, this will bring such a discharge to a close. If, however, the patient does not recover, the problem is whether one should take away a large portion of the tympanum and establish a permanent opening by way of the external auditory canal and in some way endeavor to seal up the eustachian tube and destroy the tubal cells. The divisions into tube, cavum, and mastoid portions are artificial as regards pathology. The middle ear includes everything from the pharyngeal opening of the eustachian tube to the remotest air space of the mastoid, and it is rare to find chronic inflammation limiting itself to any one division of the middle ear. In the epitympanic space we see the anatomic condition perpetuating simple inflammation because of insufficient drainage. Pierce here refers to the little pockets in this space formed by the ligaments that attach the malleus and incus of the surroundings. To get at these little pockets the best way is by irrigation through the tube or through the opening in the pars tensa. This can be done by the epitympanic cannula or through the tube itself by the Weber-Liel catheter introduced through the eustachian catheter to the cavum or isthmus and the fluid forced through the epitympanic space by the syringe. We should be careful how much we irrigate the ears in chronic otitis media. When we find that irrigation only perpetuates the discharge, all we have to do is to use a boric acid pack or a dry gauze drain. One of these will sometimes do when the other fails. Granulation tissue in the cavum projecting through a perforation above or below the short process of the malleus or covering the promontory means that the bone beneath has become more or less involved and should be removed by snare or cautery

with proper precautions. Alcohol with or without salicylic or boric acid is the most useful application in this class of cases. When the mastoid is involved, the bone must be taken into consideration and in cases in which there is destruction of the bone from cholesteatoma, operation is not always necessarily demanded. He has cured numerous cases of this kind when small and not too old by the use of the epitympanic cannula and alcohol. The history of the patient, tenderness of pressure behind the ear, and swelling, and the perforation in the pars flaccida, the skiagraph, the recovery of cholesteatomatous tissue from the washings, the presence of cholesteria crystals and bone chips in the centrifugalized pus and symptoms indicating meningeal or labyrinthal inflammation signifies mastoid involvement. Pierce has seen very little good come from suction but does not believe it harmful. It may be useful in diagnosis as to the region from which comes the pus. In one case in which the epitympanic region was involved with considerable mucus discharge, he has seen good results from the use of vaccines.

HEALTH IN BELGIUM.

A report on the health conditions in Belgium under the German occupation, the result of a special study made at the request of the Commission for Relief in Belgium, is given by W. P. Lucas, San Francisco (Journal A. M. A., Jan. 6, 1917). In this investigation he had the aid and counsel of Belgian physicians and surgeons, and a freedom of movement which under existing conditions is not possible to them. The objective of the inquiry was to determine the results of the relief that has been given and what changes might be desirable and were possible under the circumstances. Dividing the population into the well-to-do or so-called upper classes, the agricultural classes, and the industrial and minor commercial classes, the first two of which comprise about 35 per cent. and the latter over 60 per cent., he finds that in the former, health conditions are fairly good and the enforced economy and temperance have probably had favorable results from the health point of view. Furthermore the almost universal response of the first class to the calls for need has helped in giving stimulation and occupation. The agricultural classes have not seriously suffered in health conditions, but in the third class, the industrial and minor commercial class, embracing about 5,000,000 people, the case is different. Their food supply is very close to the absolute necessities of nutrition. Lucas especially notices the tuberculous situation which may be considered as directly connected with the unfavorable nutrition conditions. Under-nutrition is having its results in the increase of tuberculosis, which is easily realized when one considers that the average daily consumtion of fat lies somewhere between 20 and 30 gm. per individual, which is far too low. The growing lack in milk supply is another factor in the nutritional problem, and the diminution in the native supply of vegetables and fruit during the coming winter will undoubtedly unfavorably influence the tuberculosis situation. The increase in the tuberculosis clinics is marked. Every sanatorium is crowded; the waiting lists are larger, and the cases more acute than before the war. Statements from various hospital authorities are quoted supporting this statement, and the increase is progressing. The number of cases in the schools is especially marked in the large centers, and it is difficult under present conditions to carry out any anti-tuberculosis campaign. Already

all throughout Belgium the milk supply is deficient and of poor quality, and will be still further diminished during the coming winter. In the general adult population as well as in the school children, it is the opinion of those competent to know that the efficiency of the workingmen and laborers is markedly decreased. Another keen index of the adnormal condition in the lower classes is the diminution in maternal nursing, showing a general lowering of health and vitality of mothers. As in other warring countries, there is a great diminution in the birth rate. In children rickets has increased markedly, but infant mortality has fallen since the beginning of the war excepting in one or two large industrial centers. Institutions for directly feeding children have been greatly increased in number, and their efficiency is noted. On the whole he does not consider that the general health situation is a gloomy one under the circumstances. The well-to-do and agricultural classes are fully up to the normal, and while there is quite an amount of privation in the industrial and minor commercial classes, as a result of the relief organization the adult population is in a position to quickly recover its normal condition, and the special attention that has been given to care of children and adolescents has resulted in an actual improvement in infantile conditions in some respects. Excepting for the increase in tuberculosis and an epidemic of grip last winter and spring, the population has been singularly free from epidemics and contagious disorders. Lucas speaks highly of the skill and devotion of the medical profession in Belgium, and the magnificent work which has been performed by the women of Belgium in the care of the children. The maintenance of the relief organization is an absolute and daily necessity, and its cessation for a single month would bring a physical diseaster to the industrial and lower commercial classes of the country.

WOUNDS IN WAR.

A. U. Desjardins, Warterville, Me. (Journal A. M. A., Jan. 6, 1917), reports observations made in the present war and described the wounds received. During the first six weeks of the war the battles were in the open, but after the battle of the Marne, trench warfare has been the rule. The conditions of moist climate and intensively cultivated soil are ideal for infection of wounds, and to this must be added the necessary delays, which were more marked in the beginning, and have caused complications very difficult to meet. In spite of these, however, at the present time, many of the field hospitals at the front are equipped with every essential. The rush of cases at times is very great. A French surgeon at the Somme front, in charge of a field hospital of 2,000 beds, had 600 wounded pass through his hands in thirty-six hours. Another working behind the Verdun front had, with his associate, to perform 400 operations under shell fire in an underground ambulance on the front line. At the first dressing station no operations were performed. The wounds are examined and dressed both with a view of the cleanliness and comfort of the patients, who are sent back to the nearest field hospital where they are given one or more doses of tetanus antitoxin. The wounds are explored, and drained, accessible foreign bodies removed, fractures temporarily splintered, and all patients in condition for it are transported by motor ambulance to the nearest evacuation hospital, where needed additional treatment is given, and then sent as soon as pos-

sible by train to the base hospitals at Paris or other cities. During the first weeks of open fighting the number of bullet wounds was comparatively high, but since that time a large proportion of the wounds have been caused by shells, shrapnel, bombs, or grenades. Bayonet wounds are rarely seen, because inflicted at close quarters, they are generally fatal. The effect of the rifle bullet depends largely on the distance from which it has been fired. The frequency of explosive effects observed in such wounds received in the trenches is accounted for by the short range. There may have been isolated instances in which the German soldiers have reversed the bullets to produce greater destruction, but such are not necessary to explain the explosive effects. At short range extensive shattering of large bones is produced by the bullet, and fragments are driven through the surrounding soft parts. Clean perforations of bones are rarely seen. Shell fire is largely of two kinds, shrapnel and high explosive. The latter is far the most destructive, innumerable jagged fragments being forced through the tissues, and one of the worst features is that these tear off pieces of clothing and carry them into the deepest portions of the tissue. The sudden violent explosion of one of these shells also causes more or less shock, which is sometimes fatal. Bombs, grenades and torpedoes are of many kinds, and exploding in the trenches in the confined space they are particularly vicious; though they do not generally produce the extensive ravages produced by high explosive shells. The general infection of all the wounds may be of many kinds. Tetanus is not so frequent as at first, but the dreaded gas infection is still one of the problems of military surgery. He describes this complication, and the type of wound in which the rapidly spreading form is observed is the deep wound in which the projectile, instead of widely tearing the muscles apart, has lodged in some muscle mass, as in deep wounds of the thigh. The infection may be so intense as to overwhelm the patient in a few hours. If a soldier could keep relatively clean and could be taken at once to a well equipped hospital and cared for, the results would be better than under the condition of dirt and delay which are inevitable in this war. To combat the infection is the principal problem, and Desjardins reviews the theories and methods of Dakin, Carrel and others. He says, however, that no one method is applicable to all. The first indication is thorough exploration of the wound, removal of foreign bodies, excision of sloughs and ample drainage. At this stage continuous irrigation is of distinct value because it dilutes the discharge, and facilitates drainage. The use of antiseptic solutions is advised if the wound is one that can be thoroughly made accessible to their action, in which case it does not seem to make very much difference which one of the number of antiseptics is used. At Ris-Orangis different antiseptic solutions were used on different squads of patients. There seemed to be no great difference in the power of the different antiseptics when the wounds were properly drained, but they did show that continuous irrigation should give way to dry dressings after the acute suppuration had subsided. Prolonged continuous irrigation seemed to produce edematous flabby granulations and retard the healing process. Badly comminuted fractures, complicated by infection, should be thoroughly drained and all loose detached pieces of bone removed, but pieces not thoroughly detached should be left in place. Proper treatment of fractures and bone injuries is

an important part of the work of the military surgeon, and he speaks particularly of the value of the work of Drs. Joseph A. Blake, and Flint of New Haven in the use of the suspension method. Amputation should be a measure of last resort. The importance of after-treatment has been thoroughly recognized by French surgeons, and large hospitals have been devoted to it. The plastic restoration of substance in the soft part is another important phase of military surgery, and he mentions especially the work of Morestin at the Val De Grace in Paris. The treatment of gas infection depends on the stage of the disease when first seen. If there is only a limited amount of distention, the first indication is to lay open the infected area by multiple free incisions and remove all foreign material. After ample drainage has been provided for, continuous irrigation may be tried, but if the gas crepitation continues, the limb should be removed at once. If the infection is located in the thigh, the limb should be amputated at or near the hip bone. Subfascial injections of oxygen gas or peroxid have not given encouraging results. "The greatest lesson to be learned from the surgery of this war can be summed up in two words, 'intelligent conservatiism'."

CHRONIC OTITIS MEDIA

J. F. Barnhill, Indianapolis (Journal A. M. A., Jan. 6, 1917), says that the end results in surgical cases in chronic suppurative otitis media depend on many things, the age of the patient, the condition of the nose, naso pharynx and pharynx, the nature and violence of the original aural infection, the presence of complications, the period of the disease in which the attempt to cure is made, the general physical condition of the patient and the skill and judgment of the operator. The efficiency of the after-treatment, also, has much to do with the final results, and the conduct of the patient himself, who may neglect to follow the instructions or to return to receive further instruction which may be needed. The effect on hearing is usually good from middle ear operation; and the suppuration is cured in probably 90 per cent., provided the treatment is first class. Tuberculous cases are, of course, excluded. Nonsurgical cases probably have no mortality, but when bone necrosis occurs, the life of the patient is in danger and proper surgical treatment is the best recourse.

DEATHS OF PHYSICIANS IN 1916

During 1916 the deaths of 2,196 physicians in the United States and Canada were noted in The Journal. On an estimate of 158,000 physicians, this is equivalent to an annual death rate of 14.08 per thousand. For the fourteen previous years the mortality rates were: 1915, 15.71; 1914, 14.41; 1913, 14.64; 1912, 14.13; 1911, 15.32; 1910, 16.96; 1909, 16.26; 1908, 17.39; 1907, 16.01; 1906, 17.20; 1905, 16.36; 1904, 17.14; 1903, 13.73, and 1902, 14.74. The average annual mortality for the period from 1902 to 1916, inclusive, was, therefore, 15.61 per thousand.

The chief death causes in the order named were senility, heart disease, pneumonia, cerebral hemorrhage, accident, surgical operations and nephritis. The age at death varied from 23 to 99, with an average of 59 years, 11 months, 5 days. The general average of age at death since 1904 is 59 years, 8 months and 13 days. The number of years of practice varied from 1 to 77 years, the average being 33 years, 2 months and 21 days. The average for the past thirteen years is 31 years and 29 days.

Causes of Death.—There were 225 deaths assigned to general diseases; 261 to diseases of the nervous system; 324 to diseases of the circulatory system; 231 to diseases of the respiratory system; 129 to diseases of the digestive system; 105 to diseases of the genito-urinary system; 337 to senility; 39 to suicide; 112 to accident; 15 to homicide, and 98 after surgical operations. Among the principal assigned causes of death are senility, 337; heart disease, 215; pneumonia, 208; cerebral hemorrhage, 204; accident, 112, operations, 98; nephritis, 72; tuberculosis, 62; carcinoma, 49; appendicitis, 40; suicide, 39; arteriosclerosis, 36; diabetes, 29; angina pectoris, 26; septicemia, 21; uremia, 17; myocarditis, 16; homicide, 15; endocarditis, 14; gastritis and cirrhosis of the liver, each 13; influenza, anemia and cholecystitis, each 12; typhoid fever, 11; gastric ulcer, 10; general paralysis of the insane and paresis, each 9; paralysis, 8; dilatation of the heart, intestinal obstruction and peritonitis, each 7; erysipelas and meningitis, each 6; embolism and disease of the prostate, each 5; typhus fever, sarcoma, pleurisy, asthma and ptomain poisoning, each 4; diphtheria, pericarditis and bronchitis, each 3; malaria, drug addition, neuritis, anterior poliomyelitis, mastoid disease, duodenal ulcer and dropsy, each 2; and scarlet fever, bubonic plague, yellow fever, epithelioma, Addison's disease, leukemia, alcoholism, tabes dorsalis, Hodgkin's disease, paralysis agitans, Pott's disease, paratyphoid fever, trypanosomiasis, pancreatitis and tumor of the esophagus, each 1. One physician died in prison. Ten medical officers lost their lives from wounds received in the European, Asiatic and colonial war zones.

The cause assigned for the 112 deaths from accidents were: automobile, 28; falls, 18; railway-automobile (grade crossings), 17; railway, 11; drowning, 11; firearms, 7; poisons and burns, each 5; sun-stroke, starvation and exposure, and explosions, each 2, and Roentgen-ray burns, crushing and street railway, each 1. The 59 physicians who ended their lives by suicide selected the following methods: firearms, 24; poison, 7; hanging, 3; cutting instruments, 2, and others means, 3. Of the 15 homicides, 13 were due to firearms; 1 to cutting instruments, and in 1 the method was not reported.

Ages.—Of the decedents, 62 were between the ages of 21 and 30; 194 between the ages of 31 and 40; 343 between 41 and 50; 438 between 51 and 60; 499 between 61 and 70; 386 between 71 and 80; 159 between 81 and 90, and 19 between 91 and 99. The greatest mortality occurred at the age of 64, when 68 deaths were recorded.

Military Service.—During the year 221 physicians died who had served in the Civil War, and of these 54 had followed the fortunes of the Confederacy; 45 had been medical officers of United States Volunteers. The Medical Corps of the Army lost 8 officers; 7 had been members of the Medical Reserve Corps, and 17 had been contract or acting assistant surgeons. The Navy lost 13 medical officers; the Public Health Service 10 officers; the Indian service 3 physicians, and the organized militia 45 medical officers, of whom 6 had attained the grade of surgeon general.

Civil Positions.—Of those who died, two had been United States senators; one a member of Congress; one, governor of a state; 6, United States consuls; 13, members of state senates; 32, members of the lower houses of legislatures; 28 had been mayors; 33, aldermen; 33 had served as justices

of the peace, as clerks in the government service or in various other civil positions; 7 had been postmasters; 16, editors of medical or lay journals; 27 had also been clergymen, of whom 10 were foreign missionaries; 4 had been attorneys; 92, druggists; 40, bankers; 15, medical directors of life insurance companies; 5, dentists; 1, a president of a railway company; 1, a botanist; 1, a musician; 1, a toxicologist, and 8, chemists.

Association Fellowship.—Of the 596 Fellows of the American Medical Association who died during 1916, seven had been members of the House of Delegates; one, Dr. H. L. E. Johnson, had been a member of the Committee on National Legislation; one, Dr. Henry B. Favill, was chairman of the Council on Health and Public Instruction; five, Drs. Wisner E. Townsend, Frank J. Lutz, William L. Rodman, Philip Mills Jones and H. L. E. Johnson, had been members of the Board of Trustees, and two, Drs. William L. Rodman and John B. Murphy had served as President of the Association.—Journal of the American Medical Association, Jan. 6, 1917.

SOCIETY REPORTS

PICKENS—DEATH OF DR. WYATT.

Dr. Charles Newton Wyatt, aged 53, died December 27th, 1916, from Chronic Nephritis. He graduated from the Southern Medical College in 1887, and he attended the New York Polyclinic in 1890.

Dr. Wyatt practiced for a short time near Williamston, in Anderson County, and also for about two years at Slabtown in Anderson County. He then moved to Easley where he practiced up to within a few months of his death.

Dr. Wyatt was one of the leading physicians of the Piedmont section of the State. He was the retiring president of the Fourth District Medical Association. He had long been active as a member of his County and State Associations. He was a trustee of the Medical College of the State of South Carolina and a Surgeon to the Southern Railroad, and has several times been sent as delegate to State and National Conventions. He was a member of the local organizations of Woodmen of the World, Knights of Pythias, and Masonic Order. He stood well in every position that he occupied and by his constant attention to his profession he rose to the ranks of one of the leading physicians in this vicinity.

He is survived by his wife, who was Miss Pickens of upper Anderson County two sons, Claude Wyatt of New Hampshire, and Charles of this place, three daughters, Misses Eva, Ethel and Aleen Wyatt, two brothers, Drs. E. P. and W. R. Wyatt of this place and sister, Mrs. W. A. Mauldin, also of Easley.

J. L. Bolt, M. D., Sec.

HAMPTON COUNTY.

The Hampton County Medical Society has begun its New Year with a great deal of promise. Nineteen-sixteen was successful in every way, and now begins the second year of our existence. We had our meeting at Estill on Tuesday, January 9th, and the new officers elected at the December, 1916, meeting presided. Dr. J. N. Campbell of Varnville is now

president and Dr. P. J. Johnston of Estill Vice President. The Secretary-Treasurer was re-elected. The Red Cross unit for the County was appointed. J. N. Campbell, M. E. Ellis, P. J. Johnston, J. K. G. Tuten and J. R. Fowler, Sec.

It was further decided that the 1917 meetings would be rotary in character, the next meeting to be in Varnville, the next Hampton, the next Brunson and back to Estill. It is hoped that every one will at least attend more than half the meetings. We have all committees organized and pledge our hearty support to the State Society.

J. R. Fowler, M. D., Sec.

COLUMBIA SOCIETY.

The Columbia Medical Society was called to order by the President, Dr. J. H. Taylor at the monthly meeting December 11, 1916.

The president read a letter from the superintendent of city schools accepting the offer of the Medical Society relative to the medical inspection of school children.

The principal business of the evening was the election of officers: President, Dr. LeGrande Guerry; Vice President, Dr. LaBruce Ward; Secretary-Treasurer, Dr. Edythe Welbourne; Censor, Dr. J. E. Poore; Delegates to the State Association, Dr. J. H. Gibbes, Dr. F. M. Durham, Dr. F. A. Coward, Dr. W. R. Barron, Dr. N. B. Edgerton; Library Committee, Dr. Lindsay Peters, Dr. LaBruce Ward, Dr. W. R. Barron, President and Secretary ex-officio; Committee on Permanent Meeting Place, Dr. S. E. Harmon, Dr. W. R. Barron, Dr. N. B. Edgerton.

Under the head of miscellaneous business Dr. Robert L. Moore donated to the Society the medical library left to him by the late Dr. Fant. Motion carried that the donation be accepted with thanks. Dr. F. A. Coward, Chairman of the Committee on Norwood Memorial reminded the society of their donation. The following sums were donated toward the upbuilding of the library: Dr. J. H. Taylor, $10; Dr. J. H. McIntosh, $5; Dr. D. S. Black, $5; Dr. F. A. Coward, $5, or subscription to the Journal.

Edythe Welbourne, Sec.

ANDERSON.

The Anderson County Medical Society is beginning the New Year with a great deal of fraternal spirit and enthusiasm. The first meeting held on January 3rd, was a very beneficial one. Dr. J. R. Young, our new president, made a very able address, outlining the work for the coming year. A general discussion followed his address and some splendid suggestions for the betterment of the Society were offered and adopted.

The second meeting for the month, held on January 17th, was a scientific program as follows: Dr. J. B. Townsend read a splendid paper upon the Importance of Clinical History taking with case reports to illustrate. Dr. Ashmore having as his subject Insipient Tuberculosis, gave us a very interesting paper illustrated by X-Ray plates showing the value of X-Ray in the clinical diagnosis of this disease.

Indications are that we will have a very prosperous and successful year for the Society.

L. Carl Sanders, M. D.,
Secretary.

UNION.

The Union County Medical Society has started the New Year with a good record behind for 1916.

We have most interesting meetings every week. In fact, when a member misses one meeting he feels like it is his loss.

The officers elected for 1917 are:

Dr. A. P. McElroy, Union, S. C., President.

Dr. F. P. Salley, Buffalo, S. C., First Vice-President.

Dr. George Long, Carlisle, S. C., Second Vice-President.

Dr. S. G. Sarratt, Union, S. C., Secretary-Treasurer.

The Censors for 1917 are Drs. R. R. Berry, P. K. Switzer and W. H. Hope, all of Union, S. C. Dr. S. G. Sarratt remained delegate to the South Carolina Convention for this year.

We lost by death two physicians, Drs. T. P. Kennedy and W. O. Southard, for whom we mourn. Dr. Long has cast his lot with us, of which we are proud.

We change our program from time to time and just now we have Post Graduate work and Clinical Cases.

This year we hope to be the banner year and have the banner society of the State. We held 36 regular meetings in 1916.

S. G. Sarratt, M. D.,
Secretary.

MARLBORO.

The Harlboro County Medical Society had a very successful meeting on Thursday, December 7, 1916. Several interesting cases were reported and much discussion was engaged in. The following officers were elected for the ensuing year:

President: Dr. T. H. Smith, Bennettsville, S. C.

Vice President: Dr. C. S. Evans, Clio, S. C.

Sec.-Treasurer: Dr. D. D. Strauss, Benettsville, S. C.

Delegate: Dr. J. A. Hamer, Clio, S. C.

Alternate Delegate: Dr. W. M. Reedy, Clio, S. C.

Committee for Red Cross Medical Service in time of Disaster, etc:

Dr. T. H. Smith, Bennettsville, S. C.

Dr. D. D. Strauss, Bennettsville, S. C.

Dr. L. B. Salters, Blenheim, S. C.

Dr. A. M. Buchanan, McColl, S. C.

Dr. J. A. Hamer, Clio, S. C.

The Society adjourned to meet the first Thursday in February, 1917.

D. D. Strauss, M. D.
Secretary.

BOOK REVIEW

CARE OF PATIENTS undergoing Gynecologic and Abdominal Procedures, before, during, and after operation by E. E. Montgomery, M. D., Professor of Gynecology in Jefferson Medical College, Philadelphia. 12mo. of 149 pages with 61 illustrations. Philadelphia and London: W. B. Saunders Company. 1916. Cloth, $1.25 net.

Dr. Montgomery has presented a useful little book for the operator, the interne or the nurse. Many points have been brought out not ordinarily available without research through larger works.

APPLIED BACTERIOLOGY FOR NURSES. By Charles F. Bolduan, M. D., Director, Bureau of Public Health, Department of Health, City of New York, and Marie Grund, M. D., Bacteriologist, Research Laboratory, Department of Health, City of New York. Second edition thoroughly revised. 12mo. 188 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1916. Cloth, $1.50 net.

The author has produced a work above the average on this subject for nurses. The first volume received very favorable reception and doubtless the same may be predicted for this one.

PHYSICAL EXAMINATION AND DIAGNOSTIC ANATOMY. By Charles B. Slade, M. D., Chief of Clinics, General Medicine and Instructor in Physical Diagnosis, University and Bellevue Hospital Medical College, New York. Second Edition thoroughly revised, 12mo. 150 pages illustrated. Philadelphia and London: W. B. Saunders Company, 1916. Cloth $1.25 Net.

The writer has supplied in this book a practical working volume for the student and general practitioner. The illustrations are excellent. Many are original. The printing, binding and paper commendable.

BACTERIOLOGY AND PATHOLOGY FOR NURSES. By Jay G. Roberts, Ph. G., M. D., of Oskaloosa, Iowa. Second Edition thoroughly revised. 12mo. of 210 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1916. Cloth, $1.25 net.

This is an excellent text book of 210 pages covering the subjects of Bacteriology and Pathology in a clear and concise manner. The work has been revised and brought up-to-date in every chapter.

THE CLINICS OF JOHN B. MURPHY, M. D., at Mercy Hospital, Chicago. Volume V., Number 6 (December 1916). Octavo of 217 pages, 47 illustrations. Philadelphia and London: W. B. Saunders Company, 1916. Published Bi-Monthly. Price per year: Paper, $8.00. Cloth, $12.00.

This volume of Murphy's Clinics is of more than ordinary interest as it is the last that will ever appear from that great master of modern surgery. A few of the subjects treated are as follows:

Portrait of Dr. John B. Murphy.

Editors Preface.

In Memoriam.

The Medical History and last illness of John B. Murphy.

A Series of Unclassified Illustrations showing certain phases of Dr. Murphy's work.

Slaine Proctoclysis Apparatus, with a description of the Apparatus as used in Dr. J. B. Murphy's Clinic.

The Writings of Dr. John B. Murphy.

INTERNATIONAL CLINICS. A Quarterly of Illustrated Clinical Lectures and especially prepared original articles on: Treatment, Surgery, Neurology, Paediatrics, Obstetrics, Gynecology, Orthopaedics, Pathology, Dermathology, Opthalmology, Otology, Rhinology, Laryngology, Hygiene and other topics of interest to students and Practitioners. By leaders of the medical profession throughout the world. Edited by H. R. Landis, M. D., Philadelphia, U. S. A. With the collaboration of Charles H. Mayo, M. D., Rochester; Sir Wm. Osler, Bart, M. D., F. R. S., Oxford; Frank Billings, M. D., Chicago; A. McPhedran, M. D., Toronto; J. W. Ballentyne, M. D., Edinburgh; Rupert Blue, M. D., D. P. H., Washington; John G. Clark, M. D., Philadelphia; James J. Walsh, M. D., New York; John Harold, M. D., London; Richard Kretz, M. D., Vienna. With correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsig, Brussels and Geneva. Volume 4, Twenty-Sixth Series, 1916.

Some of the subjects given in the above book are as follows:



Extra-Grade Oat Food

Quaker Oats dominates—all the world over—because it is flaked from queen grains only.

We discard all the puny The result is, we get but ten grains, starved and insipid. pounds from a bushel.

But another result is a luxury dish—flavory and fragrant—in which millions of children delight.

Quaker Oats

Large, Luscious Flakes

We cannot better the oat, because Nature makes it perfect. But we can, by selection, get the cream of the oats, and make the dish doubly attractive.

That is what we do

10c and 25c Per Package
Except in Far West and South

The Quaker Oats Company

Chicago. (1487)

MEDICAL COLLEGE
OF THE STATE OF SOUTH CAROLINA

SCHOOLS OF MEDICINE AND PHARMACY

Owned and Controlled by the State.

Eighty-seventh session begins October 1st, 1915, ends June 1st, 1916.

Fine new three-story building immediately opposite the Roper Hospital. Laboratories of Chemistry, Bacteriology, Anatomy, Physiology, Pathology, Clinical Pathology, Pharmacology and Pharmacy provided with new and modern equipment.

The Roper Hospital, containing 218 beds and extensive out-patient service, offers unsurpassed clinical advantages.

Two years-graduate service in Roper Hospital with six appointments each year.

Ten full-time teachers in laboratory branches.

For Catalogue, Address

OSCAR W. SCHLEETER, Registrar,

LUCAS and CALHOUN STS. CHARLESTON, S. C.

A Clinical Consideration of Migraine—John A. Lichty, M. Ph., M. D.

Duodenal Ulcer in Infancy—Henry F. Helmholz.

Where Obstetrics and Paediatrics Meet; Infant Welfare—J. W. Ballentyne, M. D., F. R. C. P. E., F. R. S.

The Psychology of the Criminal Under the Sentence of Death—Paul E. Bowers, M. S., M. D.

Convergent Squint—Linn Emerson, M. D., F. A. C. S.

Granular Ulceration of the Genitalia—Henry Tucker, M. D.

Backache—Some disputed points in the mechanics thereof—P. B. Magunson, M.D.



The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, $2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.
J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.
WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital, Boston, Mass.

OBSTETRICS AND GYNECOLOGY.
ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY
M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.
G. T. TYLER, M. D., Greenville, S. C.
R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.
J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.
E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

OPTOMETRY BILL.

COLUMBIA, S. C., Jan. 24. 1917.

Dr. E. A. Hines,
Editor S. C. Med. Journal.
Dear Dr. Hines:-

For the information of the members of the Association who may not be informed of the standing of the present bill to license opticians and so-called optometrists I beg that you let this letter appear in the next issue of he Journal.

After defeating the optometrist bill on the floor of the house for several years, including last year, the Legislative Committee took the matter up direct with the American Medical Association.

Dr. Green, the councillor of the A. M. A., advised the committee that these people would gain their point in time and that it would be advisable to have a bill passed that would be as little objectionable as possible. After a conference between committees from both associations the present bill before the legislature was drawn up and submitted to the American Medical Association for approval.

Upon the unqualified approval of Councillor Green, together with the sanction of the Secretary and President of the S. C. Med. Association, this bill was introduced last year by Mr. Liles of Orangeburg, and this year by Dr. G. A. Neuffer of Abbeville.

Any one wishing to read the contents of this bill has but to drop a line to his representative.

Yours very truly,
J. H. Taylor.
Chm. Legislative Com.

Ruling by the President on Insurance Situation.

Dr. C. B. Earle, President of the South Carolina Medical Association, Greenville, S. C., upon request has made the following ruling in reference to fees for examination for life insurance, under date of Jan. 25, 1917. The request came from Dr. C. B. Epps, Sumter, S. C.

Under the resolution adopted in 1917, by the State Medical Association no physician can be legally authorized to accept a fee of less than $5.00 for examination for a Life Insurance Company, in which a Urinary analysis is made. I therefore rule that it is not permissible for a physician to make examinations for less than $5.00, where Urinary analysis is required, even though he receives a higher fee than $5.00 for larger policies, thereby bringing the average up or beyond $5.00. The rule is very clear in that it states that it shall not be made for a smaller sum than $5.00.

With reference to your second question: "Is it permissible for a Physician to make Insurance examinations for a salary, no matter whether he received an average below or above the $5.00 fee." I would rule that he would be guilty of a discourtesy to the profession, if by accepting this salary it was done with the intention of evading the resolution of 1907, and therefore it would be very questionable as to whether, under any circumstances an examiner would be justified in receiving a salary from an Insurance Company. Industrial Policies of $500.00 and under, and Fraternal Insurance was excepted under a resolution adopted in 1914.

Program for State Association Meeting

The call for titles of papers met with immediate response and it is probable that the final program may be completed earlier this year than usual. The provisional program will be published in the March Journal. All who intend to read papers should send titles to the Secretary at once.

A special effort will be made this year to give every reader an opportunity to present his paper on time and to make the discussions of more than ordinary interest.

The place of meeting, in the magnificent new Cleveland Hotel at Spartanburg, will lend itself to the concentration of our activities for the best advantage, both socially and scientifically.

ORIGINAL ARTICLES

PRACTICAL HYDROTHERAPEUTICS AS APPLIED TO SOME GASTROINTESTINAL DISORDERS.

George M. Niles, M. D., Atlanta.

WATER, the cup that cheers but not inebriates, the universal solvent, has claimed our attention from the earliest antiquity. As a therapeutic agent it has proved most efficacious, and since Naaman, the Syrian, was healed of his leprosy by bathing in the river Jordan, even to the present moment, there has been no lack of earnest adherents to the various methods of hydrotherapy.

I may properly say that there is no phase more important than its application to gastrointestinal diseases,

and an attempt will be made to briefly cover the practical indications for and methods of employment.

One of the first principles is to instruct each patient to drink copious amounts of water with each meal, unless logically contraindicated. With this injunction should be given the assurance that the water will not be harmful; otherwise some disciple of ancient traditions will utter prophesies of digestive danger, so that it will be taken with a mental attitude of apprehension.

The uses of water in lavage and intestinal irrigation will not be covered; and it might be stated that, while a few of the more exacting methods of hydrotherapy can be employed only in properly equipped institutions with trained assistance, most of them are available at home.

Nausea.—In nausea arising from an overloaded stomach, or where an excess of sticky mucus is constantly rising in the throat, the ingestion in rapid succession of several glasses of tepid water so that it will be expelled with some force will give relief. The patient should be admonished not to be afraid to drink enough (three to six or even ten glasses), for when sufficient has been drunk, it will be evacuated. Sometimes, where the emesis does not prove too exhausting, this procedure may be repeated several times until the water comes back clear. This is a substitute for gastric lavage where the latter is not available.

This method of "washing the stomach" is also useful in the nausea following an alcoholic debauch.

After the stomach has been completely emptied, there may be then given either small pieces of ice, or very hot water may be sipped slowly. The application of towels wrung out in ice water, and frequently applied to the neck is a domestic remedy, but a good one. Hot moist compresses applied to the epigastrium are helpful, and a hot foot bath often has a quieting effect on the upset stomach.

Quite useful is the alternate douche, which resembles the Scotch douche in that it employs both hot and cold water; but differs from it in that the Scotch douche consists of a single application at each temperature—first hot then cold—while in the alternate douche, hot and cold water are repeatedly applied in alteration. This alternation may be continued as long as may be thought necessary, and is indicated in nausea from nephritis or the nausea in nervous anorexia.

Another valuable aid is found in the employment of cold abdominal compresses, sometimes called "Neptune's girdle," in which the abdomen is encircled by a thick towel of liberal proportions, saturated with cold water. This may be removed and resaturated every one or two hours. Ice-water compresses or ice bags to the epigastrium may be used for nausea in robust patients, but where there is weak heart action, or where the cold is disagreeable to the patient, the hot applications are generally preferable.

It may be advanced as a general principle in hydrotherapy that the sensations of the patient should form an important criterion in choosing the hot or cold applications. Some there are whose very nature seems to revolt at the use of cold, and it is harmful to force them to endure it. Others find cold applications both soothing and comforting, and these will be benefitted by such. As the physiologic effect of the extremes of heat and cold are practically the same, this choice is logical and permissible.

In some of these patients who are hyper-sensitive to cold, the alternating douche may be first used with the

warm current greatly in preponderance; gradually increasing the cold interval until they become accustomed to it.

The alternate douche is probably the most exciting of all hydriatic procedures, combining with the heat the secondary stimulating effects of the cold, and, though the removal of the heat accumulated by the skin is renewed, its reflex activities maintained, and thus the excitant effect of the hot applications are intensified and prolonged.

Anorexia.—This condition, especially the nervous variety, may be aided by an ice-bag over the stomach half an hour before meals, followed by cold-mitten friction, if it can be administered by one of experience. Hot and cold gastric lavage, as advocated by some, is, in my opinion, rather a drastic procedure, unless called for to meet other and more pressing conditions.

A thorough gastric lavage with a nitrate of silver solution (1 to 500) on alternate days has seemed to exercise a decidedly good effect in several cases of obstinate anorexia under my observation.

Acute Gastritis.—In some of these acute irritative states of the gastric mucosa, no water or any other substance will be retained, and it is necessary to use enemas for several days for both food and water. During this time, however, much may be accomplished by hot compresses over the bowels every two hours, and by both hot foot baths and leg packs at intervals of every three to six hours.

The vomiting of acute gastritis calls for much the same hydro-therapeutic procedures as vomiting from other causes. In addition may be employed the hot and cold trunk pack, and, if the patient is not averse, an ice-bag to the spine opposite the stomach. An excellent measure also is the revulsive compress. This differs from the alternating hot and cold application in that the hot compress is kept on from four to five minutes, while the cold is permitted only fifteen or twenty seconds.

Where the gastritis is accompanied by fever, the hot blanket pack, followed by a cold half-pack is generally helpful. old applications alone are seldom indicated.

Chronic Gastritis.—In this pathologic condition hydrotherapy finds a useful field. For the excessive accumulation of mucus, a gentle lavage once daily, lessened to once to alternate days, as improvement sets in, is nearly always indicated.

For the local discomfort there may be given hot fomentations or compresses several times daily, with a Scotch douche once daily, if the patient is robust. For the flatulence and gaseous eructations, either hot or cold compresses to the epigastrium may be employed, with an ice-bag to the spine two or three times daily in addition to the lavage. Occasionally a pint of quite hot water, sipped half an hour before meals prevents the flatulence. Abdominal flatulence is generally controlled by hot compresses over the whole abdomen, and an occasional asafetida enema, sent rather high up the bowel.

Achylia Gastrica.(Hypochlorhydria).—Cold douche over the stomach, and cold percussion daily, if the patient can stand it. Cold, wet girdle over epigastrium half an hour before meals, and kept on about fifteen minutes. A small cold enema to be retained, and taken two hours after eating, is said to increase the motility of the stomach (Kellogg).

In addition, other procedures, mechanical and electrical are indicated for diminished or absent gastric juice.

Hyperchlorhydria.—This is general-

ly a symptom of an underlying lesion, but hyperchlorhydria itself, whether primary or secondary, can be greatly helped by rational measures of hydrotherapy, while many of the distressing manifestations of hyperacidity may be alleviated.

The procedures are nearly opposite those in the previous condition. Revulsive compresses once or twice daily, an hour before eating, or, if this is not agreeable, a continuous heating compress over the epigastrium. Cold douches over the stomach or spine opposite the stomach are contraindicated though a hot douche or fomentation over the spine is serviceable. Hot water in limited quantity may be sipped a short time before each meal.

For the pain, which accompanies the excess of free acid, hot fomentations may be applied for fifteen minutes when this appears, followed by hot compresses to be worn until the next meal.

The bowels should be kept freely open with warm enemas given daily.

Gastroptosis or Enteroptosis.—This calls for general tonic measures, composed with massage and supportive appliances. The fan douche may be used two or three times daily, and is a modification of the jet douche, attained by placing the thumb over the nozzle delivering the jet, breaking it into a fan-shaped stream. This is usually cool or cold.

Dilatation of Stomach.—Avoid drinking large quantities of fluid at meal-time or any other time. This is one of the few conditions where large draughts of water are contraindicated, as the relaxed and atonic walls of the stomach are unable to evacuate the fluid promptly.

Lavage once daily is indicated, and if posible the patient is to eat rather early supper and have the stomach thoroughly cleaned of all food accumulation just before bed-time. The rest over night will greatly help. This rest in the empty state for eight or ten hours is strongly advocated by J. W. Weinstein.

Externally the cool or cold fan douche is indicated, with cold epigastric compresses, without impervious covering, changed every three or four hours. In addition, there may be applied once daily a hot blanket pack, followed by a short, cool fan douche.

Should there be hiccough due to either irritation or stasis of food, in addition to faradization with one electrode over the spine and the other over the stomach, there should be employed hot and cold alternate gastric compresses, followed by an ice-bag to the epigastrium and back of neck. The patient may also slowly sip 1-2 pint of ice-cold carbonated water, holding the breath for half-minute periods, and with presure of hands over the stomach force it up against the diaphragm.

Constipation—In few digestive disorders does hydrotherapy exercise a more happy effect than in this. Apart from the various enemas, which have been described, the following procedures, as suggested by Hinsdale, may be used:

In fairly robust individuals, whose circulation is good, the application of a cold pack or compress to the abdomen every morning may be given a preliminary trial. This cold compress should be changed once or twice during the ten or fifteen minutes of the application. Where there are suitable appliances, a cold douche at 65 or 60 F. may be applied for fifteen or twenty minutes with about 20 pounds pressure. This will probably give better results in obstinate cases than the compress or pack. The reaction which ensues is accompanied by an increase of blood in the abdomi-

nal vessels, thus favoring functional activity.

In patients not so robust, and with sluggish circulation, a hot douche or warm compress may be made at first, and later on the temperature may be gradually lowered from day to day.

Compresses are more suitable for old and feeble patients than the more energetic treatment by douches. The cold thick compress, or "Neptune's girdle," placed over the abdomen, and renewed every four hours, affords quite a marked stimulus without discomfort or depression.

In that form of constipation denominated spastic, accompanied by muscular rigidity, hot fomentations must be employed. They should be of generous dimensions, extending well beyond the borders of the irritable and painful area, should be wrung dry to avoid blistering, and should be changed every five or ten minutes. They should be covered with rubber or any material that will retain the heat. One, two, or more layers of thick cloth, flannel, or felt, make a satisfactory medium to carry the water. When, in addition to heat, a counter-irritant is desired, a small amount of turpentine or mustard may be added to the water for the fomentations. A hot-water coil or covered electric compress may be tried, but the heat without the moisture is not so efficacious.

When constipation assumes the chronic form, unless obstructive, it generally resolves itself into one of two forms—atonic or spastic. These two forms require certain variations in their management.

In the atonic variety every measure tending to improve the tone of the muscular system is called for. If possible, the hot-air or electric cabinet should be used to produce perspiration, followed by the circular jet, Scotch, and fan douches. These measures should then be followed up by abdominal and general massage, if skillful service of the sort are available; otherwise, they should not be attempted. Aimless and desultory rubbing of the abdomen accomplishes no good.

Many of these stubborn cases of chronic atonic constipation are really brought about by kinks and torsions of prolapsed abdominal viscera, and in such conditions, mechanical support, or in extreme cases, surgical correction, will be required. After that, hydrotherapy will be of more tangible assistance. To blindly employ this admirable branch of therapeutics in connections where surgery or mechanotherapeutics is logically indicated, is to court failure, and tends to bring hydrotherapy into undeserved disrepute.

Nervous Dyspepsia.—This term is at present in disrepute, some, especially those with a decided surgical bias, denying absolutely there are ever any marked symptoms of indigestion without underlying organic lesions.

The symptoms are many, and sometimes shift from one syndrome to another with kaleidoscopic rapidity. It is surprising what incongruous groupings of pains and discomforts are described to the physician, while these neurasthenics almost demand that each pain or ache receive separate and distinct attention. The hydrotherapy, therefore, will be principally symptomatic, and should not displace rational methods, surgical or otherwise, for the cure of actual and tangible disease.

For the general malaise and weakness, graduated cold baths may be administered twice daily, plus a brief percussion douche to the spine. For the spinal irritability, fomentations at night to the back, followed by a heating spinal compress to be worn

till morning, is of benefit. "Neptune's girdle" also may be used at times.

For the pyrosis, eructations, and regurgitation of food, there may be given twice or three times daily fomentations over the epigastrium, followed by a heating compress most of the time during the interval, without impervious covering, and renewing every three or four hours.

The cold extremities call for the running cold foot bath, followed by a hot leg pack. Brisk massage of the extremities is also helpful.

The frequent headache, which nearly always accompanies nervous indigestion, generally yields to hot and cold head compresses with massage to head and neck. In this condition the cool compresses are desired more than any other, especially if the face is flushed and hot, and the eyes suffused.

For the abdominal weight and tenderness, which is commonly associated with excessive peristalsis and gurgling, there are indicated a hot fan douche to the whole abdomen, followed by revulsive sitz-bath. These may be followed by fomentations twice daily, or the wet girdle protected with an impervious covering.

It is a very good idea to multiply and prolong these procedures, if the patient has the time, for they take the mind away from its introspective trend, and occupy it with novel and interesting sensations.

Jaundice.—For the pain or uneasiness in the right hypochrondriac region, fomentations may be used over the stomach and liver for fifteen minutes every two hours, followed by heating compress. The bowels should be flushed by a copious hot irrigation with a recurrent tube twice daily, followed by an oxgall enema, if the fecal evacuations are scanty. For the relief of the discolored skin, a hot trunk pack, or a hot immersion bath, followed by a cold towel rub is useful. The patient should drink water copiously, and receive once daily either a sweating wet-sheet pack or an electric light bath. For the itching, which is sometimes most annoying, he may receive the neutral saline bath, with very hot sponging. The treatment of the anorexia, nausea, and general symptoms of gastric catarrh are the same as for these symptoms in chronic gastritis.

Gastric Ulcer.—Apart from measures to relieve pain, to tone the patient, and to keep the bowels sufficiently open, hydrotherapy possesses no very wide range of usefulness in this affection.

For the gastric hemorrhage, either an ice-bag over the stomach, or, if available, a cold coil over a cold compress is an effectual aid, the flow of ice-water being kept up continuously and the application kept in place over the epigastrium for a week or more, if the patient can bear it. In addition, there may be applied an abdominal pack, changed every three hours, with an occasional coil of hot water inserted in the pack. Early in the morning the body may be rubbed off with a cloth wrung out of very cold water, avoiding the chest and abdomen, followed by a brisk rub.

During convalescence general tonic applications are recommended, but I wish to stress the caution that hydrotherapy should not be relied upon to the exclusion of other approved remedial measures in gastric ulcer or hemorrhage. This also applies to duodenal ulcer.

The rank and file of the regular profession have long been indifferent to the beneficent reults to be obtained by the rational use of water, thereby permitting many of its most useful

potentialities for good to be arrogated by quacks and charlatans.

To Baruch and Winternitz and Kellogg and Hinsdale and a small number of other laborers we owe a debt of gratitude for investigating this subject in a scientific manner; for an unprejudiced and convincing exposition of what hydrotherapy is and is not; and for spreading abroad the sane doctrine that a healthy body needs for its best work an abundance of water internally and externally.

ON TUBERCULOSIS.

By A. Dan. Morgan, M. D., North, S. C.

Treating Pulmonary Tuberculosis by Surgical Principles.

NATURE provided the same defense against the tubercle bacillus as against other local infections.

It follows: in the development of pulmonary tubercle, we have the same sequence of events as may be seen around an ordinary boil.

Congestion, induration, fibrous formation; likewise in course, there is the same necrosis and liquifaction of the central mass. The normal course is for this fibrin to become organized into an encapsulating membrane enclosing the detritus just as it would any other foreign body. This does occur frequently, after which the infection is no longer a consideration in the health of the individual. The contained mass may be absorbed and the cavity filled in with scar tissue or: It may become a calcified or a cheesy deposit.

That the normal is not the most common clinical history of local infection is due to the two principal factors: Pus and Motion. Pus contains a digestive principal, trypsin, which dissolves or digests the fibrous formation.

Motion hinders the formation by breaking it up.

Let it be remembered, the tubercle bacilli are not pus producing organisms, therefore, we do not have trypsin to disintegrate the fibrous deposit. It follows, the natural defense, encapsulation, should be practically a specific and I am persuaded that it is, if we can elminate the other factor, Motion. Even with motion, consider the immense number of instances in which an encapsulated focus has been found in an otherwise perfectly healthy lung; the original lesion admitted to have been caused by the tubercle bacilli.

Case:—When a supra orbital nerve was extracted a reddish fluid exuded through the foramen. On exploration about 10.c.c of this fluid was found under the orbital roof, with some bone exfoliation. On clinical evidence, this was a tuberculous focus and there was no pus.

You have all seen tuberculous joints get well while being kept in a plaster-cast.

Case:—By clinical history, tuberculosis of a dorsal articulation, excessive mobility of the vertebral column, almost total both sensory and motor paralysis of lower extremities. A six inch section of tibia grafted on to the spinous processes and a plaster jacket, restored the patient to the activities of life.

What did we do? There was no pus, trypsin. We had only the other factor motion, this we controlled and nature completed the cure.

I believe the benefits derived by phthisical patients who submit them-

---

Prepared on invitation from the Lexington County Medical Society and delivered in the Leesville Hospital —, 1916.

By request Repeated before the Eighth District Medical Association, visiting Doctors and the invited public, in the Ridge Springs Baptist Church, July 12, 1916.

selves to the "Fresh Air and Rest Cure," is because it requires less lung play—less motion—to secure the necessary oxygen.

Can we fulfil indications and place a lung at rest?

We can. You have seen hydro- and pyo-thorax compress the lung. The literature abounds with instances in which wounds have permitted atmospheric pressure to collapse a lung.

Case:—A man fell against the business end of a large circular saw while it was attending to business. He had the good fortune that it went in between ribs and only deep enough to remove about four inches of the pleura. Of course the lung collapsed. After careful closure he went on to what might be called a disgustingly uneventful recovery.

About fifteen years ago Dr. John B. Murphy established the introduction of Nitrogen into the thorax for the purpose of collapsing the lung as a standard operation.

Permit me to digress: If you have a mixed infection, pus and cavities, put the Nitrogen in and force drainage. If you have pleuritic adhesions, no matter from what cause, put the Nitrogen in with a little more force and tear them loose. If you have a penetrating wound, put the Nitrogen in and let it rest and heal. If you have a severe hemorrhage from the lung, do not worry over not having Nitrogen; blunt the point of the largest hollow needle at hand, enough to keep from sticking it in the lung. Filter the air with a bit of cotton, use your finger as a valve and let the patient's respiration pump on enough pressure to control the blood. The reason why for Nitrogen is that it takes longer to absorb than any practical substance yet suggested. It is not ideal because it absorbs too quickly, about four days.

Dr. Murphy has proposed a fistulous opening with some arrangement to filter the air. I have decided to let him do it first.

It is my unhappy distinction to report the only instance which permits even a suspicion, that possibly this operation may have caused a death. The case will be considered at length, though it cannot be accepted as ideal for the treatment, it is typical of conditions as they exist and a forceful comment on accepted methods.

About three years before coming under my care, the patient, a nurse in training, suffered with an intense pain in the right auxillary region. This was diagnosed, "Intercostal Neuralgia." Progressive loss of weight and debility were noted. About a year later, she had graduated and was practicing in the city. Haemoptysis occurred. From accounts given me, some should have been called severe hemorrhages. The Pathologist reported negative findings.

A diagnosis of vicarious menstruation. The whole from over work and advised to take a rest. She came home and consulted me. I found an afternoon elevation of temperature and tuberculine gave a positive reaction. On this, with what has been said, I diagnosed pulmonary tuberculosis and advised—No—I urged, compression of the lung with Nitrogen. One cannot blame the girl for declining to accept my opinion against her teachers, nor for refusing a treatment of which she had never heard. It was some two years before she gave consent. During this time she repeatedly returned to the city for advice. The Pathologist continued to report negative findings; the Physicians noncommittal, doing nothing. Clinical evidence became so overwhelming they eventually agreed to my diagnosis and

as stated the case came under my care.

The point of election for making this puncture is between the fifth and sixth ribs on a line with the anterior axillary border. The needle went into an area of adhesions and we got in only a hundred fifty c.c of gas.

The patient shortly after spit up the first classic consumptive sputa.

You recall the intercostal neuralgia; it is now explained. The next sitting the puncture was made between the sixth and seventh ribs a little back. The needle moved freely and as the gas flowed the patient complained of a tearing sensation and all present heard the snapping as the adhesions gave way; reference to the chart will show the increased displacement of gas.

On March 5th, the 36th day of treatment and 9th sitting, I had entered the needle between the seventh and eighth ribs further back, this because of repeated punctures. The gas had been turned on and I was watching to see about the flow. There was barely a notable displacement; certainly not more than 10 c.c. The patient cried out, "Everything is turning blue", and was in convulsion. Of course I stopped. There was vomiting of a projectile type and a drenching sweat. Convulsions continued in quick succession and of considerable severity for about two hours; she then lay as if sleeping.

After waiting some hours and making several futile efforts to rouse her, I called Drs. Boylston, Davis and Jones.

By using catheter same 15. c.c. of urine was obtained. The nitric acid test showed near 30 per cent albumen.

These gentlemen gave their opinion: tuberculous kidneys. She remained unconscious and died in about 21 hours. Her sister informed me, approximately a fortnight before the first sitting, she had a slight convulsion and severe headaches and had exacted a promise not to tell me, saying, she believed she had diseased kidneys and if I found it out I would not treat the lungs.

The nurse corroborated and stated there was usually a detritus ppt. in the urine. In an extended research of the literature I was unable to find an indication that 10 c.c. of gas would cause death even if it had been delivered in a vein.

You see the size and bluntness of the needle. Could it be gotten into any vein in that region? For argument, presume, the needle passed below or through the diaphragm, into whatsoever viscera or cavity. Where is the rational basis to suppose it would have produced the clinical history presented. In the classic instance in which the patient cried out: "My blood is leaving my body," death occurred before anything could be done.

I have not found a case in which death was attributed to either gas or air embolism where it was delayed for even an hour.

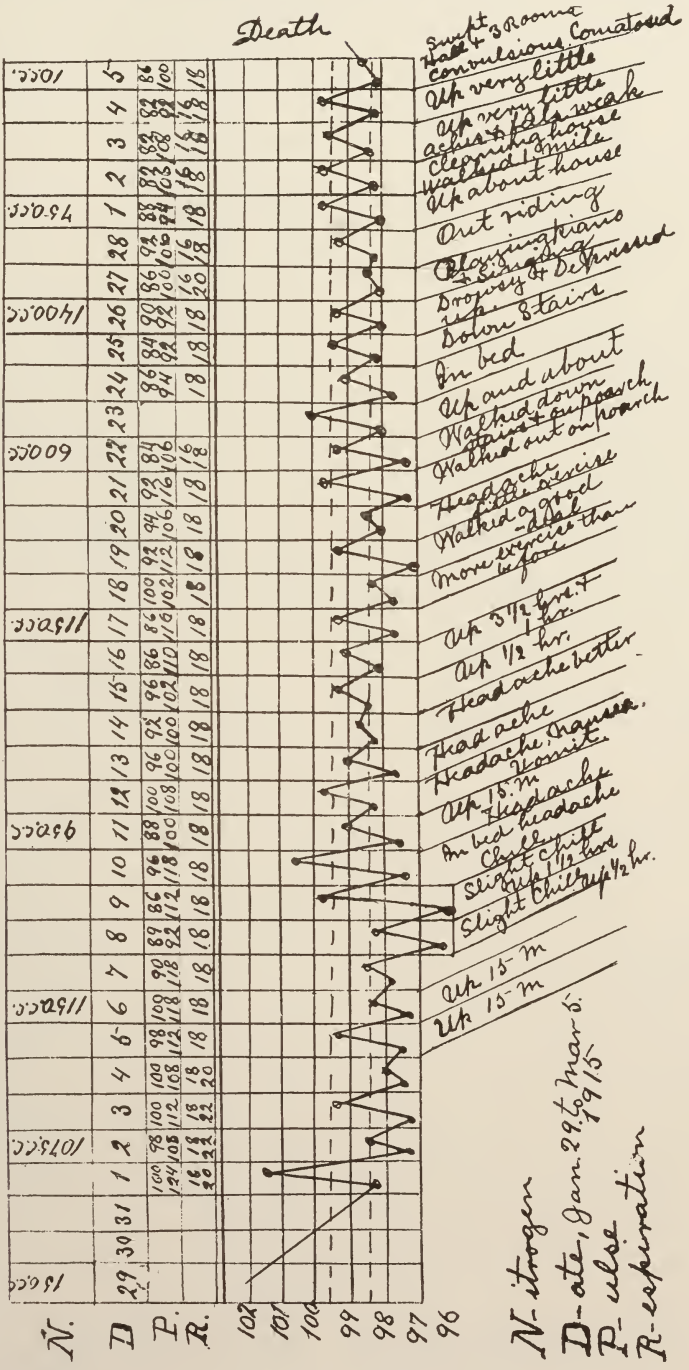
The case is reported as a matter of common fairness. These are my conclusions. You, gentlemen, having no cause for bias are more competent judges. "What might have been." One may readily believe the doctors, knowing the limitation of medical treatment and not knowing this operation saw but refused to admit "the hand upon the wall." And with characteristic City egoism, they refused to be enlightened by a countryman.

The pathologist proved, our present laboratory methods are not competent to our demands. Tuberlce bacilli cannot be found till the detritus is being discharged; likewise, there are

no rales and cavities for the clinician to find.

An afternoon elevation of temperature, particularly if increased by exertion, progressive loss of weight, with a positive reaction from tuberculine: spells, tuberculosis. If we are to hope for best results, treatment must be started before the methods of yester year can make the diagnosis.

In the case under consideration, even so late as the hemorrhages, the adhesions were weak, the cavities small and the kidneys not infected. At the



stage in which treatment was undertaken, in this as in all similar cases, result, is the only proof if trial is advisable.

But, why let patients go on to such a condition.

You will please give attention to the chart. The nurse who wrote the data did not come on the case till Feb. 1, and record of the first three days has been lost.

The human body is at its best generating antibodies, autogenous vaccines, antitubercular serum. Whatever the correct word may be, the fact remains, the human body when kept at an afternoon temperature of 99.5, is at its greatest capacity generating a something which cures tuberculosis.

This temperature control must be by control of bodily exercise and not by the use of medicines.

We obtained this record by keeping the patient in bed at so nearly absolute rest as we could approximate, until the temperature was controlled. Possibly, I somewhat overdid it. You note two mornings, 96.1 and 96. I am skeptical about these remarkable temperatures, the nurse proved herself reliable.

When the temperature is under control then permit the patient to roll over in bed, lift one to a sitting position, with the feet over the edge of the bed; thus forcing the temperature to the standard by exercise which progresses to cutting stovewood. If by any chance the temperature goes above the correct reading then back to rest.

It is a pleasure to give Miss Susan V. Hucks, R. N., honorable mention for her proficiency in managing the daily increase of activity. The rows of figures show the Pulse, Respiration, Date, Nitrogen and at bottom daily notes.

Concerning Climate and Diet. We have a very creditable article of both sunshine and fresh air. Good eating is nothing new in the North neighborhood.

Dr. Murphy's apparatus for doing the compression is not practical for me because I am not in reach of a laboratory prepared to refill the gas tank. The dealers had none other to offer. Therefore, I had to construct one of my own. Which is presented.

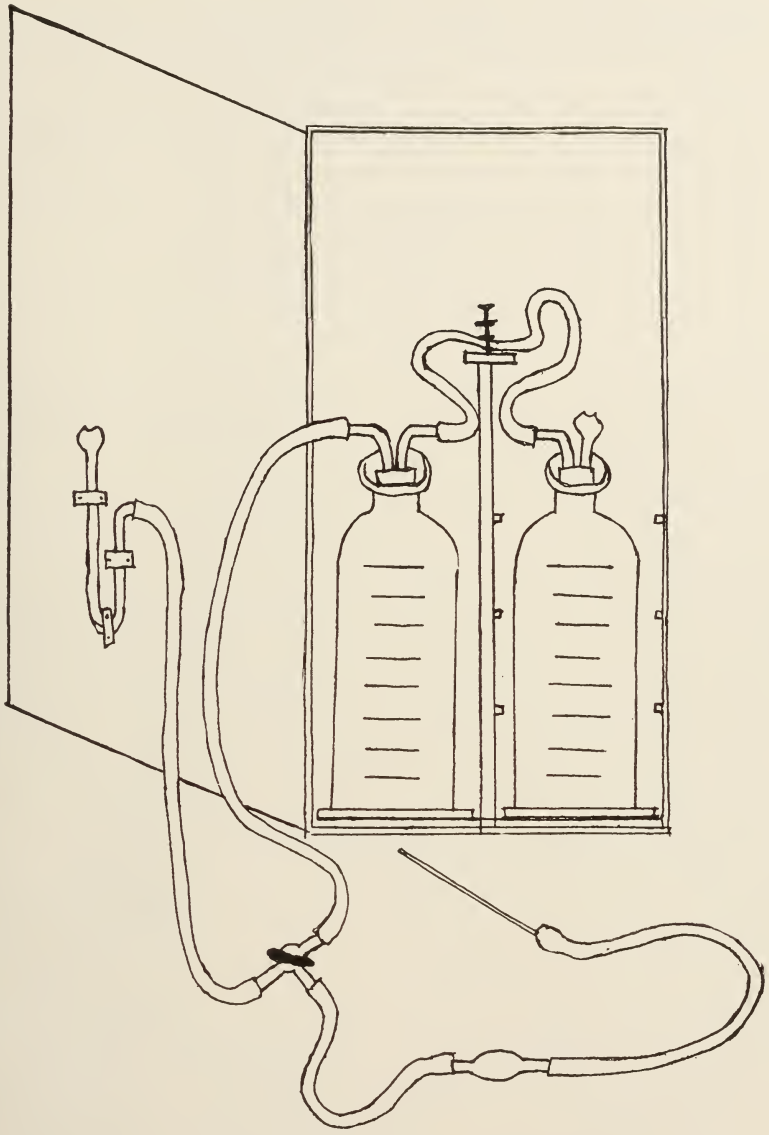
I am sorry but I cannot claim one item of originality. I am immensely complimented in having had the honorable assistance of Dr. Murphy and Prof. Wm. Burney. I also thank an article in the J. A M. A., and the makers, Messrs. Eimer & Amend.

In acknowledgement of your courteous invitation for a paper, permit me to name it, The Lexington Nitrogen Apparatus. It is a case 26″x15″x8″ outside. Inside a middle partition 16″ high with a tube clamp at top. Fitted in each side is a piece of board worked to a suitable bottle seat. One is movable and a system of brackets are above to elevate the water bottle, there is a closed hole in the top for the bottle neck when raised. Two bottles of 4250 c.c. Each graduated to 50 c.c. with figures etched every 500 c.c. to 3500 c.c. Each has a rubber stopper perforated in two places for glass tubing. Each has a tube bent at top and reaching near the bottom for syphonage, the water bottle has a thistle top air tube, the nitrogen bottle a short connecting outlet tube.

A manometer, best with thistle, fixed against the door of the case. A three way glass stop cock. A bulbous filter glass to be filled with cotton. Take a hypodermoclysis needle to the grindstone and blunt the end, then file a small hole near the end. Connect with best red rubber tubing and the apparatus is complete.

To charge, put

Pyrogallic Acid 9.5 in gas bottle and



pour in warm water to 675. c.c.

Potassium Hydroxide 15.

Water 100.

Pour this solution in to the 750. c.c.

Cork, close stop cock and clamp, shake and let stand three hours.

This formula is subject to correction, the problem is to absorb about a leiter of oxygen from the air. Loose the clamp, and the minus pressure causes syphonage. Hydrostatic pressure is regulated by the movable shelf. The manometer shows if minus or plus.

Consumption has lost its mystery and romance. And but for ignorance and poverty one would hunt for remnants of The Great White Plague in another generation.

NEPHRITIS DISCUSSED—WHY PHENOLSULPHONEPHTHALEIN?

By N. B. Edgerton, M. D., Columbia, S. C.

SINCE Bright wrote on kidney disease there have been thousands of names associated with these conditions in the literature. Wilkes, Virchow, Weigert, and Chaufford have however made the most notable contributions to this subject. In studies concerning kidney efficiency Rowntree and Geragthy have made probably the most useful contributions with their phenolsulphonephthalein test.

Practically every man who has written anything on Nephritis has had a classification according to his particular ideas of the subject. As a result the classifications have been almost numberless and peculiarly varied, each probably based on some scientific fact or notable clinical observation.

A classification based on the primary pathological change seems to be the most scientific. This idea has been followed in the classification used in this paper. We find then that we may be dealing with (1) A tubular nephritis; (2) A glomerular nephritis; (3) or finally, a vascular nephritis; we may have these combined and the picture greatly altered. (Cabot).

The first type Tubular Nephritis is the rarest and the following are typical etiological causes:

(a) Corrosive Sublimate poisoning.
(b) Arsenic poisoning.
(c) Syphilis occasionally.
(d) Chronic pulmonary tuberculosis.
(e) All of the same conditions that cause Amyloid kidney: prolonged and profuse suppuration, empyemas—septic fractures. The symptoms presented by this type of Nephritis are a universal oedema, low blood pressure, and the following urinary changes:

(a) A urine diminished in amount, diminished in specific gravity, its color pale, containing albumen from one quarter to one per cent., and a sediment with fat on the cells, fat on the casts, and fat free.

The Diagnosis is made of this very rare type of Nephritis from the above etiological causes, low blood pressure or probably normal pressure combined with the above urinary changes.

In the second type Glomerular Nephritis you have primarily pathological changes in the glomerulus. The greatest and probably the only cause of this pathological change is infection by Bacteria. The streptococcus is the type of organism responsible for the infection. It is not so much the strain that causes pus as it is the strain that causes rheumatism, endocarditis, and Chorea. (2). The Pneumoccus is another type of this sort of infection. Rosenow has shown that the pneumococcus can be transformed by cultural growth into the Streptococcus and vice versa, so close is their relation. Another great cause of Glomerular kidney change is Scarlet Fever and it has been argued that Scarlet is probably caused by kidney infection with the streptococcus. (3). Certainly there is no way of disproving this claim since the kidney is so often attacked in scarlet fever, and in so many cases in which we have no changes in the kidney at the time of actual acute fever (Scarlet fever) later in after years sometimes as late as three decades we have a very virulent type of Nephritis showing up after an exposure to cold or wet. Who can say that the Nephritis is not due to streptococci harbored in the kidney during this elapsed time?

Probably in a good many cases of Nephritis in which you are able to

Read before the South Carolina Medical Association, April 20, 1916.

elicit no cause you might check it up as due to latent kidney infection from that old scarlet fever. Erysepelas caused by streptococci causes glomerular kidney change.

The Symptoms depend on the stage. In the early stage we have,

(a) Urine moderate Amt.
(b) Sediment clear.
(c) Blood casts and bloody granular debris.
(d) Blood free in the urine.
(e) Large trace of Albumen from one-eighth to one-quarter of one per cent.

The Prognosis is a probable prognosis. They may get well. In the later stage you have.

(a) Hypertrophied Heart.
(b) Symptoms of Uremia.
(c) Urine increased in amount.
(d) Inability to concentrate the urine. That is if the person is given a large amount of water and the specific gravity taken both before and during the time of increased kidney work—and there is no change in the specific gravity. This is the condition.
(e) Small amount of albumen or none at all.
(f) Small number of casts or none at all. Hyaline and granular casts are found.
(g) Specific gravity of 1.010 or lower.

In this chronic stage a kidney can undergo an acute change and produce a hematuria. In order therefore to differentiate this condition we have to rely on the blood pressure. In the chronic type you have a high blood pressure, and in the early stage, or acute type, a normal blood pressure is present. It only takes about a week for an acute nephritis to raise the blood pressure and cause hypertrophy of the heart. Then it comes under the head of chronic nephritis.

The Prognosis is very grave. With this kidney change the patient rarely lasts for more than two years.

And exaggerated arterio-sclerosis in the kidney usually accompanied by a general arterio-sclerosis is known as Vascular nephritis. Cerebral symptoms and heart symptoms are usually complained of by the patients. They don't have oedema and they don't have uremia but they do have a high blood pressure. They can concentrate their urine. They live usually for ten or fifteen years and usually die of heart disease. They don't have blood or fat in the urine.

The diagnosis is made on the presence of high blood pressure and the symptoms outlined above. Glomerular and Vascular nephritis may be mixed and the picture greatly altered.

There is a great deal of satisfaction in being able to make more exact diagnoses and a greater accuracy in prognosis is needed. Given a specimen of urine in which you have found albumen and casts, unless you follow up the lead which this information gives you you have failed to take advantage of the needed methods of diagnosis which are open to you. In failing to take advantage of all the agencies aiding in diagnosis you have woefully gone astray in your duty to your patients. Granting that this is a fact, one should seek to find the total efficiency of the kidneys in question and how stable that efficiency is.

For infection and suspected surgical procedures the Genito Urinary man has particular and a more accurate method of finding the total and differtial efficiency of the kidneys. But for routine work among men who have not the time to spare nor the equipment, there is a procedure of using Phenolsulphonephthalein which gives very accurate information usable in diag-

nosis, prognosis and treatment of Nephritic conditions.

A test solution is made up in test tubes, the sol. ranging from 5% to 70% with a 5% increase of contained dye in each tube, giving you a test scale with which readings varying 5% may be made. This is the only equipment needed for the test except an ordinary glass syringe and some of the dye, which can be secured made up in I. . C. ampules (6 Milligrams to I. C. C. normal salt sol.) from Hynson Wescott and Co., Baltimore, Md.

The method chosen because of its easy application and essential accuracy is as follows:

Give the patient two glasses of water about twenty minutes before you intend to give the dye. Give the dye with a Luer syringe under the skin when the bladder is empty. After two hours and ten minutes have the patient void. Add Sodium Hydroxide to the urine to alkalinity and enough water to bring the total to one liter. Take a test tube full and compare with the scale.

Remember that when the excretion of this red dye is changed at all it is changed a great deal, that in a normal young man you should get 70 per cent.

Every decade the excretion is less.

Man of 60 in bed should get 40 per cent.

Man of 60 up and about should get 50 per cent. In an old man with prostatic trouble you may have to use the catheter. Excretion is usually diminished in acute nephritis, and also in the late stages of glomerular nephritis. In vascular nephritis according to the destruction of the kidney. Acute passive congestion gives a decrease. Phenolsulphonephthalein is excreted wholly by the kidney even when given by the mouth.

In connection with the treatment of Nephritis I wish to call your attention that in acute nephritis the kidney should be spared. (a)Hold back water. (b) Limit proteids, especially meats. (c) Carbo-hydrates don't do the least harm because they are burned up in the body. (d) Spare salt because salt tends to produce oedema.

In the Chronic Forms: (1) Uremia and the high blood pressure must be combatted. You can't spare the kidneys in the chronic type like you can in the acute because if you do you will spoil the man. Keep down meats. People don't eat chicken all the time. (a) Each day allow meat once a day—a piece of meat the size of the palm of the hand; either red or white meat. Cut out meat soups, for their salty flavor acts as an irritant to the kidneys and they have practically no nutritive value. Allow all vegetable soups. Certain kidneys are irritated by asparagus, celery, and tomatoes. Keeps salts as low as possible. The quantitative estimation of albumen is practically of no value, the estimation of urea is so variable that there is no regular deduction that can be made from its results. The elimination of "Phthalein" in the "red" test outlined above gives you information that is at once reliable and accurate and at the same time easy of application.

Acute Uremia should be treated by (1) Purgation. (2) Hot air baths. (3) Venesection with the withdrawal of one pint of blood, substituting therefor approximately the same amount of Saline solution. Purgation is particularly useful in the dropsical cases and in the chronic cases that seem to be getting on all right, purgatives should be used about twice during each week. In this particular I wish to call your attention to the two different ways of giving Magnesium sulphate, each for an entirely different result. Magnesium Sulphate give with a good deal

of water simply acts as a purgative and merely empties the bowel. Given in a concentrated form it sucks water from the tissues in order to satisfy its natural desire for water—and in this way acts as a depletent. This is the way in which it should be administered when given to deplete an oedema caused from broken compensation in chronic nephritis. Given in the concentrated form in nephritis without odema it is at times apt to cause acute poisoning producing profound kidney irritation, severe vomiting and probably a comatose state. The long standing high blood pressure should not be treated at all. There is no medicine that will do it any good unless syphilis be associated. The treatment of the high blood pressure is the same as the treatment of the Uremic symptoms. If acute trouble comes on (1) Bleeding (2) Purgation, (3) Hot air baths.

In closing I again desire to call your attention to the simple apparatus needed to use the "red" test as a routine. That the literature has been full of experiments done for comparative purposes and that the concensus of opinion seems to be that phenolsulphonephthalein when given in essentially the correct method its results are accurate. That the method which I have given you was worked out by one of the best Urologists (Cabot) in the country, for the particular use of the man doing general work.

The best surgeons are having the comparative, the differential, and the total kidney function estimated thru the combined use of the cystoscope and the "phthalein" output. They are finding that their results are better, and that a great many useless surgical procedures recorded in their past experiences are now hardly ever executed because of their closer association thru the cystoscopist with the efficiency of the Urological tract. The general medical man altho he be far away from a good laboratory can easily use such a simple test as I am urging today and it is my plea that you at least give it a trial in any condition in which you suspect the kidneys. You will save yourselves a great deal of humiliation from a wrong diagnosis and prognosis, and will gain the confidence of your patients much faster through such procedures.

TWO CASES OF SUDDEN DEATH ASSOCIATED WITH ENLARGEMENT OF THE THYMUS, OCCURRING IN THE SAME FAMILY.

A. Moultrie Brailsford, M. D.,
Mullins, S. C.

IN order to appreciate the dangers attending an enlargement of the thymus, let us consider for a moment the situation and size of the normal gland.

The thymus consists of two lobes bound together with loose connective tissue, situated in the anterior mediastinum and extending from the upper edge of the manubrium about 6 cm downward. Posteriorly, the upper edges of the gland cover the trachea and the lower edges rest upon the upper two thirds of the pericardium. The average width is 3 cm and the weight is about 7 gms. These figures are taken from the report of Bovaird and Nicoll who weighed and measured the thymus in 495 consecutive autopsies and represent the average weight and size of the thymus gland for a child about one year of age.

When we consider the small area known as the anterior mediastinum and the firm unyielding anterior wall formed by the sternum and the important soft structures crowded into the

Read by Title before the S. C. Medical Association, Charleston, S. C., April 20, 1916.

posterior surface and the small superior aperture of the thorax, separating the spine from the sternum—a distance of only 2.5 cm., we can readily estimate that the normal thymus practically fills this space and that enlargement thereof will press upon the soft parts in the posterior wall.

The important structures in relation to the thymus are the trachea, the oesophagus, the great vessels, phrenic and pneumogastric nerves in the superior mediastinum and the pericardium and pleura in the anterior mediastinum.

In the cases here reported the parents were white, family history negative, the children were the youngest of six, both were about four months old, both were girls, and their births occurred in successive order about eighteen months apart. They were healthy, well nourished babies, were breast fed, and had never been sick. Both were found dead in the morning having been put to bed the night before apparently quite well. There was no autopsy performed upon the first child, but the parents readily consented to having a postmortem done upon the second child. In fact, they were anxious to have the mysteries surrounding the sudden deaths dispelled, for in the wild grief of the mother she imagined it was some special visitation or affliction had sent upon her.

Upon opening the thorax, the thymus was found completely covering all of the structures of the superior and anterior mediastina, and extending from 2 cm. above the isthmus of the thyroid below to a distance of about 12 cm., covering every thing except the lower one-fourth of the pericardium. It appeared to hug the trachea, but was easily removed in tact, commencing at the lower pole and working up. To our astonishment we found that the gland extended into the neck above the isthmus of the thyroid from which it was lifted with ease.

I saw this case with Dr. F. L. Martin, who weighed and measured the specimen. The gland was about 12 cm. in length and about 5 cm. in width, weighing 34 gms. The cases were reported and the specimen exhibited in Florence at the meeting of the Pee Dee Medical Association last fall, and in some unaccountable manner the specimen became misplaced and has never been recovered.

The enlarged thymus was the only abnormality found anywhere. There were no enlarged glands in the cervical, submaxillary, or bronchial regions, and the spleen and mesenteric glands appeared normal. It was evidently not a condition of Status Lymphaticus. There is much evidence in support of the fact that thymic death may show an enlarged gland with no other characteristic lymphatic changes. In this connection it is an interesting question as to the exact cause of thymic death. Many hypotheses have been advanced. Some believe that it is due to the pressure exerted by the hyperplastic thymus on the vital organs in this region; others that the pressure exerted by the gland is sufficient to cause trachea stenosis; while again it is thought to be due to pressure on the pneumogastrics. Hyperthymization or excessive internal secretion producing a toxemia is also supposed to be a cause of sudden death.

I believe in the cases here reported it was from mechanical pressure upon the trachea at the superior opening of the thorax—"the critical space"—only about 2. cm. in its antero-posterior diameter, and in this line accommodating the oesophagus, the trachea, the great vessels, and the thymus.

When we consider the weight of the thymus and contrast it with the fibrous tracheal rings, it seems improbable that sufficient pressure could be exerted to result in death from asphyxia, still cases have been reported which were undoubtedly afforded relief by the operation of anchoring the thymus to the under surface of the sternum.

Upon questioning the mother in regard to the other children, she said they all were easy to "catch cold," as she expressed it, and often became "stuffed up" and breathed hard. This dyspnoea or stridor evidently was due to enlarged thymus glands. In a recent report from Dr. Kerley he stated there is an opinion held among medical men at the present time that many of the cases which were considered Laryngismus Stridulus are due to a moderate thymus enlargement.

Sudden deaths associated with enlarged thymus are as yet not definitely understood, altho they are not rare. Most of the cases observed have been between four and eighteen months old.

The circumstances particularly interesting in the cases here reported are that the victims were members of the same family and that the other children exibited symptoms of enlarged thymus.

CONQUERING MEDICINE AND SURGERY.

By Robert Thrift Ferguson, M. D.
Gaffney, S. C.

I SHALL undertake to address you today on the little things in medicine and surgery that tend to make us their masters.

In the ten years I have practiced I have studied human nature from almost every angle: physically, morally, financially, and spiritually; and have been a close observer of all that tends to make a man great in this or any other profession. Ours is the noblest profession of them all—not excepting the ministry—for who can minister to the hearts and minds of the sick like the physician? Who can win the confidence of a person so easily as a physician? I have practiced medicine and surgery in some of the big hospitals of the east; I have practiced medicine on the peaks of the great Alleghanies, and I have practiced in the foothills of the Blue Ridge here in our own state, and I find human nature is the same in all localities, being influenced principally by the degree of education which it attains.

You and I were accustomed, as boys, to the old-fashioned country doctor (God bless him!) who never went further than to look at the tongue and feel the pulse and guess at the rest—and he was a power for good in his day—and loved above every other public man—and the most imposed upon of all—but that day has passed. They spent one year in the medical schools and had no hospital internship. We spend four and five years in the very best medical schools and from one to three years in hospitals, and even then we feel that we are only beginners in this profound science we have undertaken to conquer. They looked at germs macroscopically while we see them microscopically. We venture into fields where our predecessors dared not touch. It's a big jump from the age when the arteries were supposed to contain air to our age when we know that they contain blood.

A glance at the tongue is merely an index to a patient's history, and a touch of the pulse is merely an index

*Read by title before the S. C. State Medical Association, Charleston, S. C., April, 1916.

to the great stream of blood that is driven through our bodies by that indescribable piece of human machinery called the heart. Having located the two great indexes let us not stop until we have examined the most remote organ or part of the body.

Probably the most ridiculous person on earth today is the doctor who, when he gets sick seeks the most thorough examination and fumes and frets till every possible means at hand has been exhausted to make a diagnosis in his own case and when called himself to see a patient looks at his tongue, feels his pulse, measures out an indefinite quantity of phenacetin, a probable five grains of calomel with a dirty pocket knife that he has used to trim his nails, pick his ears and teeth, open an occasional abscess, and cut off a chew of tobacco, then pockets his fee and pats himself on the back that he was able to treat the patient so scientifically and his pocketbook so handsomely. This, gentlemen, is what has brought scorn on the medical profession and what you and I must overcome and outlive.

There is no profession in the world that is so dearly loved by its constituents as is the medical profession. Every trade and calling has its hardships and drawbacks, but in return none is so richly rewarded by such grateful and loving hearts as is ours. There is no calling more exalted than the physician and none that requires one to walk more nearly in the straight and narrow path, or to more exactly follow the golden rule than ours. We must be sympathetic and firm at the same time—not cold blooded as we are sometimes termed. Sickness longs for sympathy and sympathy in return begets confidence, and it is our duty to be prepared to handle this confidence as sacred as our own souls. We should be Christian doctors and above all Christian gentlemen and use our influence at all times for the right; for, oftentimes, it is in our power to influence many persons either for good or for evil.

It is perfectly astounding when we are confronted with the fact that in this state there are physicians practicing medicine who do not know the meaning of the word "Antiseptic;" at least they never practice it. Think of a physician going into an obstetrical case without washing his hands or using gloves! It is criminal, yet it is occurring right here under our eyes every day. There was never a truer saying than that "Cleanliness is next to Godliness."

This leads me to speak of one of the greatest fallacies known to the civilized world in any profession and that is the mysterious secrecy which pervades our profession. It harbors mistrust and I am glad to say that it is being gradually eliminated. Why should there be any secrets so profound that we cannot discuss them frankly with the patient or his family? Why should our prescriptions be written in latin when the majority of the druggists know no more? Again I ask, why should a consultation be held over a patient and the physicians consult in secret over what they found or didn't find. Why not take some member of the family into our confidence and discuss nothing out of his hearing? Let us discard this air of mystery that prevails. Are we afraid that some of our errors may be detected or some of our carelessness be laid open to criticism? I believe, and practice, that every consultation should be held in the presence of some member of the family or the patient himself—circumstances permitting— and that every phase of the case be laid before him. A duty conscientiously performed can-

not hold any fear that anything can possibly develop at a consultation that will injure the physician in charge. The patient pays for the consultation and is entitled to the whole opinion of the consultant. Consultations are held for the purpose of obtaining help and suggestions along every line known to modern medicine and surgery; and because some physician has failed to examine or have examined the patient's blood, urine, feces, sputum, or something else, he should not feel ashamed when his consultant suggests that such examinations might throw light on the case. The only cause for shame, and rightly so, is where the physician has been derelict in his duty and has neglected through pure carelessness to make a thorough examination. There is no excuse for it when the State Board of Health furnishes all these aids free of cost for the benefit of those who are unable to perform these duties.

Gentlemen, let me impress upon you the fact that we should never undertake to pursue any line of treatmen until we have exhausted every means known to medical science to make a definite diagnosis; then, and only then, can we treat the patient scientifically and give to him and his family or friends an intelligent prognosis. There is no bigger humbug on earth than the doctor who prescribes patent medicines and depends on the proprietary drug houses to furnish him ready made remedies instead of studying the individual case and writing original prescriptions to suit each individual — Polypharmacy is the greatest evil in our profession. Why pour a conglomeration of poisonous drugs into a patient from pint and quart bottles when one simple drug of the right kind properly compounded is all that is needed. Have you ever stopped to consider that a four ounce mixture given in teaspoonful doses, the conventional three times a day, will last about a week? And have you considered that under ordinary circumstances if the patient doesn't receive some benefit in that time it's useless to continue that line of treatment longer? Then why prescribe pints and quarts when four ounces will answer? Why put your patients to extra expense of buying so large a quantity only to be left on hand and thrown away?

If I have not been deceived the patients are sometimes wiser than the doctors and after taking a mixture for a few days without benefit they will discontinue it.

I am proud to say that I have never been guilty of prescribing a dose of patent medicine since I have been practicing. Patients can go to any drug store and buy all the patent medicine they want without sending for me and paying me $2.00 to write a prescription for "arui," "Peruna," or "Tanlac." Physicians are largely responsible for the success of the multimillionaire patent medicine manufacturers and fakirs. How often have you picked up your daily paper recently and read in prominent headlines that a "prominent doctor" of your neighboring state prescribes and recommends Tanlac in his practice! Isn't it a disgrace that our profession is guilty of aiding and abetting such a practice!

Another thing that I would call to your attention is the amount of jealousy that exists among the members of the medical profession; probably greater than in any other profession. What is there to be jealous of if we do our duty? Every man is known by his works and the right will always prevail, so why worry over what your neighbor or competitor does?

Medical ethics, as practical today, is largely "BOSH." The American Medical Association publishes a nice little book of twenty or more pages on medical ethics, but who abides by it? The definition of ethics as given by "Webster" is: "The science of human duty; a particular system of principles and rules concerning duty, whether true or false; rules of practice in respect to a single class of human actions." My definition of medical ethics is "Gentlemanly conduct of one physician toward another," or the golden rule, "Do unto others as you would have them do unto you," and no further books on medical ethics will have to be published.

Then let us try with all our power to elevate our profession and build it on a foundation whose base is as broad as the universe and whose apex reaches to paradise.

THE EYE OF THE PREGNANT WOMAN.

By Charles W. Kollock, M. D.,
Charleston, S. C.

AN abnormal condition of any portion of the body may affect other and distant parts even though there seems to be no direct connection between them. This is especially true of the eye and it seems almost unnecessary to remind you that affections of the brain, nose, mouth, heart, lungs, liver and kidneys, especially the last—are accompanied at times by abnormal conditions of the eye which are undoubtedly due to affections of these more or less distant parts. It is doubtful if pregnancy can be regarded as strictly an abnormal state but it may cause conditions which are not only abnormal but injurious to health and even dangerous to life. The pregnant woman often becomes temporarily changed in many ways while in that condition. The general health may not be as good as usual, or a woman may be infinitely better physically while pregnant than at other times. In some instances they are much depressed (especially during the earlier months), even to the state of melancholy and temporary insanity. The appetite is often capricious, as shown by an actual aversion to food, or it may be abnormally large and with cravings for foods that are never eaten at other times.

The eye is not usually directly affected by pregnancy and beyond vague asthenopic symptoms or the making more apparent latent refractive errors it is doubtful if pregnancy—in itself—ever causes any special affection of the eye.

But pregnancy does cause nephritis and this in some way is responsible for the condition known as albuminuric retinitis. Albuminuria occurs in from 2 to 20 p. c. of pregnancies but albuminuric retinitis is far less common. It is seen oftener in primpara, especially during the second half of pregnancy, but has occurred as early as the third month. Wadsworth reported a case of detached retinae occurring during pregnancy which, after delivery, became re-attached and Hutchinson mentions one case of albuminuric retinitis and recovery in a series of pregnancies but finally ended in blindness. The retinitis of pregnancy does not differ in appearance from that seen in other forms of Bright's disease which have different causes.

Uremic amaurosis may occur either with or without retinitis being present and in many instances there are no recognizable changes in the eye-

Read before First District Medical Association, Charleston, S. C., Jan. 24, 1917.

ground barring, perhaps, a slight edema about the optic disk. The poison which affects the retina in the puerperal state is endogenous and either affects directly the ganglion cells or causes ischemia which interferes with nutrition. Ischemia is produced by the effect on the sympathetic nerve, causing constriction of the retinal vessels, or on the splanchnic area which causes dilatation there and constriction elsewhere.

Diagnosis.—The appearance is usually characteristic of chronic nephritis but must not be confounded with the neuro-retinitis of brain disease and is still more complicated if albuminuria complicates brain tumor. Glycosuria and leukemia also have at times similar appearances. The white spots in the retina do not have the pigment heaping which is characteristic of choroidal atrophy and the so-called "snow bank" (white area around the disk) should not be mistaken for retained nerve sheaths which are not accompanied by edema of the retina or changes at the macula. Of course the condition of the urine is a most important help in diagnosis. Uremic anaurosis (or blindness) may occur at any time whether the retina is affected or not and quite frequently there are no fundus changes to warn us of danger which emphasizes the importance of frequent and careful examinations of the urine.

The Prognosis for sight and life depends upon the duration of gestation. Upon the termination of pregnancy inflammatory conditions usually subside and vision is restored if the process has not continued too long. For this reason the induction of premature labor is advised especially when the eye is involved during the first half of pregnancy. Culbertson reported recovery in retinitis of pregnancy of full vision in 16 p. c., partial in 58 p. c. and blindness in 25 p. c. Silex of 26 cases followed reported 11 recovered vision above 1-6, 10 below 1-6 and 5 were almost blind.

Treatment.—As the affection occurs oftener in primpara and during the earlier stage of pregnancy and as the prolongation of gestation under these conditions is dangerous to sight and life there should be no hesitation in bringing on premature labor, especially when uremic blindness has occurred. It is a wise precaution to have opthalmoscopic examinations made at intervals during gestation for a knowedge of the condition of the retina should prove most valuable to the obstetrician. The following case came under my observation some years ago at the Roper Hospital:

A bright mulatto woman was delivered after having had a number of puerperal convulsions which recurred several times after delivery. Her recovery was a surprise on account of the severity and duration of the convulsions but, although stone blind, she gradually improved and when first seen by me was sitting up. She had then been blind at least a month, if not longer, and the outlook was more than gloomy for any return of vision. The opthalmoscope showed typical albuminuric retinitis fields, the nerves becoming atrophic, the fundi dotted with white spots and plaques, the vessels thickened and in some parts having taken on the silver wire appearance. The condition of the urine had improved but I am not quite certain whether it showed albumen then or not. She was placed upon iodide of potassium in ascending doses and much to my surprise within a short time began to perceive a glimmer of light which increased rather rapidly until very fair vision was present. As the appearance of the eye-ground did not change perceptibly it

is fair to suppose that the blindness, at first due to uremic poisoning, was kept up by the exudations and edema which by pressure was gradually destroying the nerve and retina. The treatment came just in time to prevent absolute atrophy. The history of this case is given to show that even the worst cases of this kind should not be given up until all methods of treatment have been tried. It may be interesting to add that this woman became pregnant again and went to full term without trouble when she was delivered of a large and healthy child.

QUESTIONS BY STATE BOARD OF MEDICAL EXAMINERS.

NURSES. OBSTETRICS.

Dr. E. W. Pressly, Examiner, November, 1916.

1. Define (10) of the following terms, viz.: abortion, asphyxia, neonatorum, syanosis, evisceration, galactagogue, gestation, lochia, multigravida, parturient canal, pelvis, placenta, primipara, secundines, and witch's milk.
2. Name the bones of the pelvis with articulations that are of obstetric importance, and describe the differences between the pelvis of the female and that of the male.
3. What is morning sickness, at what time of gestation does it begin, and in what does it differ from hyperemesis gravidarum?
4. Describe the duties of a nurse at a normal labor with a physician in attendance.
5. How should a retained (non adherent) placenta be delivered?
6. Describe the physical characteristics of the normal lochia, and tell how these characteristics may be altered by the presence of disease (E. G. septic infection) in the puerpera.
7. Name the (2 forms of hemorrhage that may occur during gestation, usually at a late period) and state their causes and manifestations.
8. Name some of the most frequent accidents and diseases that may effect the new born and describe the management of the malady known as ophthalmia neonatorum.
9. Describe the hygiene of the mother and child during the two weeks immediately succeeding delivery.
10. What is omphalitis and what causes its occurrence?
11. What is cephalhematoma, what causes it, what is its prognosis, and what its management?
12. What is caesarian section, and when is it necessary,

(N. B.) Answer questions one to nine inclusive. Answer one of questions ten, eleven and twelve.

NURSES. PHYSIOLOGY.

Dr. A. M. Brailsford, Examiner. November, 1916.

1. Describe the circulation of the blood commencing at the left ventricle of the heart.
2. What functions does the blood perform?
3. Mention the nerves of special senses.
4. What are the glands of Internal Secretion?
5. What are the functions of the skin and what glands are found therein?

HYGIENE AND SANITATION.

1. What should be done to prevent an epidemic of diphtheria?
2. In what ways may typhoid fever be conveyed?
3. How would you sterilize blankets when nursing in a country home?
4. What precautions would you observe in nursing a case of pulmonary tuberculosis?
5. Give the sanitary care of a patient

with typhoid fever, scarlet fever, entero-colitis.

NURSES. PRACTICE OF MEDICINE.

Dr. J. J. Watson, Examiner.
November, 1916.

1. A patient has a tarry stool (very black) what conditions or drugs might cause very black stools?
2. Define—(a) Irregular pulse.
   (b) Intermittent pulse.
   (c) Tachycardia.
   (d) Bradycardia.
3. What symptoms would cause you to suspect that a patient with typhoid fever was having a hemorrhage before blood appeared in the stool?
4. Give the characteristics of the respiration in croup?
5. What is the usual temperature and its duration in a case of lobar pneumonia, occurring in a young adult?

NURSES. MATERIA MEDICA AND THERAPEUTICS.

Dr. H. L. Shaw, Examiner.
November, 1916.

1. What are Anesthetics? Name two local and two general anesthetics.
2. What are anodynes, or analgesics? Name two local and two general anodynes.
3. What are antiperiodics? or Antimalarials? Name the best one.
4. What are Antipyretics or Febrifuges? Name two and give dose of each.
5. (a) What are Antiseptics? (b) Germicides? Name one of each.
6. (a) What are Cardiac stimulants? (b) Cardiac sedatives? Name one of each.
7. (a) What are Emetics? (b) Antiemetics? Name one of each.
8. What are hypnotics? Name one and give dose.
9. What are Hemostatics, or Styptics? Name one.
10. What are Cathartics? How are they divided? Name one drug and dose in each division.

NURSES. ANATOMY.

Dr. J. T. Taylor, Examiner,
November, 1916.

1. Name the arteries of the arm and of the forearm.
2. Name the divisions of the spinal column.
3. If your patient had lost both arms, where would feel his pulse?
4. Give the position of the liver.
5. Give the position of the spleen.
6. Name the cavities of the heart.
7. Name the large blood vessels that convey blood into the heart.
8. Name the large blood vessels that convey blood out of the heart.
9. What kind of joint is (a) knee joint, (b) hip joint?
10. Give in your own words what you conceive to be the functions of the ribs.

OBSTETRICS.

Dr. E. W. Pressly, Examiner.
November, 1916.

1. What is the size of the human ovum at the end of the first month of gestation, and what at the end of the second month? What appearances in an embryo would warrant you in saying that the embryo, prior to expulsion, had reached the 5th month of utero gestation, and what the seventh month?
2. What is included under the term pathology of pregnancy?
3. What are the effects of pregnancy on syphilis acquired coincidently with impregnation or of impreg-

nation while the syphilis is still in the florid stage?

4. Diagnose a breech presentation. What is its prognosis to (a) mother (b) child? Give in detail the mechanism of labor and management of such a presentation.
5. What are obstetric forceps, what is their single legitimate function, what conditions must obtain before their application is warranted, what symptoms justify and what demand their use? Give in detail technique of their use in L. O. A. position with head at inferior strait.
6. Define the term "compound presentation," give an example of this presentation and give management of it.
7. Describe an attack of puerperal eclampsia. Give its causation, tell what danger signals proclaim that an attack impends, and give management of a patient where such signals are present, and of a fully developed attack.
8. What varieties of hemorrhage may occur in the pregnant woman, parturient woman, and in the peurpera giving the causes from which hemorrhage in the peurpera may arise?
9. Differentiate between accidental and unavoidable hemorrhage. What is placenta praevis? What are its varieties? Describe its manifestation, give its prognosis and its management.
10. Describe the causation, symptomatology, and management of chorea gravidarum.

PHYSIOLOGY.

Dr. A. M. Brailsford, Examiner. November, 1916.

1. Discuss the functions of the Pituitary body.
2. How are the sensations of sound registered?
3. What is meant by Metabolism?
4. Mention the secretions concerned in digestion and the action of each.
5. What would be the effects of an injury to the anterior limb of the Internal Capsule?

HYGIENE, SANITATION, STATE MEDICINE.

1. By what methods would you determine the purity of drinking water?
2. What steps would be taken to prevent the spread of Infantile Paralysis?
3. What is meant by the incubation period of a disease? (b) What is the incubation period of measles, smallpox, scarlet fever?
4. Define Humidity. What is meant by relative humidity?
5. How would you prevent the breeding of flies in stables and cow lots?
6. What would be the proper ventilation for fifty (50) pupils and how would you obtain it?
7. What precautions should be taken in a case of scarlet fever to prevent an epidemic?
8. Mention the different kinds of immunity and define each.
9. What diseases are common in the tropics? (b) How are they conveyed and prevented?
10. What hygienic and sanitary measures are necessary in treating a case of typhoid fever?

PRACTICE OF MEDICINE.

Dr. J. J. Watson, Examiner. November, 1916.

1. Give the etiology and symptoms of cerebral abscess.
2. What are the causes of cardiac arythmia?

3. Differentiate pulmonary consolidation from pleuritic effusion.
4. What clinical and laboratory findings would you require to make a diagnosis of sub-acute infective endocarditis. (Streptococcus viridans infection).
5. Mention the symptoms due to obstruction of the venous circulation incident to atrophic cirrhosis of the liver.
6. (a) What symptoms would cause you to make a diagnosis of thrombosis of the femoral vein during a case of typhoid fever?
   (b) What stage of the fever would it most likely occur?
   (c) Which femoral vein is most likely to be affected?
   (d) Why?
7. Give concisely the Allen or starvation treatment of diabetes mellitus.
8. (a) Describe a case of sciatica.
   (b) Mention the etiology of sciatica.
9. A man 30 yrs. old consults you complaining of left lumbar pain. To what condition may this be due? Briefly differentiate the conditions which you mention.
10. Describe a case of itch. (scabies).

BACTERIOLOGY and PATHOLOGY.
Junior Curriculum.
Dr. John Lyon, Examiner.
November, 1916.

1. What are the staining peculiarities of:
   (a) The bacillus Tuberculosis?
   (b) The gonococcus?
2. What are the morphological and cultural peculiarities of the bacillus diphtheria?
3. Describe the lesion in acute lobar pneumonia and state briefly the effect on the normal functions of the lungs.
4. What is the pathology of shock?
5. Name the varieties of gangrene and give the pathology of each variety.

GYNECOLOGY and PEDIATRICS.
Senior Curriulum.

1. How would you treat dysmenorrhoea in a virgin?
2. When is a uterine curretage indicated, and when contraindicated? Should you perforate the uterus during this operation, what would you do?
3. Mention the causes, and describe the method of diagnosing and trating, Coccygodynia. (painful coccyx).
4. Give the pathology, etiology and treatment, of subinvolution and hyperinvolution of the uterus, respectively.
5. Describe the technique or draining a pelvic abscess by a vaginal incision. When is this operation indicated?
6. How would you treat a case of scarlet fever, and when would you regard the patient as non-contagious?
7. Describe the symptoms in hypertrophic pyloric-stenosis.
8. Describe a case of intussusception).
9. Discuss the etiology, and describe the symptoms, of Sydenham's chorea.
10. How would you manage a case of acute ileo-colitis in a child two years of age?

ANATOMY. Junior Curriculum.
Dr. J. T. Taylor, Examiner.
November, 1916.

1. Describe the temporal bone and name the bones with which it articulates.
2. Name the muscles of the spinal column.
3. Give the origin of the internal mammary artery.

4. Give the formation of the portal vein.
5. Name the branches of the vertebral artery.

ANATOMY. Senior Curriculum.

1. Name the structures from without inward through which you would cut in doing a section through the middle of the thigh.
2. Name the structure from without inward through which you would cut in doing a section through the middle of the forearm.
3. Which area of the brain gives rise to most of the voluntary movements of the body?
4. What are the chief dangers that may result in a removal of the parotid gland—especially when there is malignancy?
5. In Angina pectoris, why is there pain in the shoulder?
6. Give the origin and distribution of the uterine artery. What artery is it continuous with?
7. Name the arteries of the abdominal walls.
8. Describe the line of the posterior tibial artery.
9. Name the ducts of the pancreas. Into what does each empty?
10. Give the collateral circulation after ligation of the third portion of the subclavian artery.

SURGERY.

Dr. Harry H. Wyman, Examiner.

November, 1916.

1. Discuss the causes which retard, interfere with, or prevent the healing of a wound. (1) Factors in wound itself. (2) In the treatment of a wound.
2. Give the symptoms, prognosis, prophylaxis and treatment of acute gonorrhoea in the male How and when would determine the patient cured?
3. Classify fractures. Give symptoms, signs and methods of diagnosis.
4. Discuss the dangers, the reflexes and methods of determining the safety of a patient under (1) Ether. (2) Chloroform.
5. Differentiate acute osteomyelitis of upper part of tibia from acute synovitis of knee joint. Prognosis and treatment of each.
6. Give preoperative and postoperative treatment in patient with ulcer of stomach.
7. Give in detail the onset and symptoms in their sequence of acute appendicitis. Give treatment in patient who could not be operated on for several days.
8. Give etiology, pathology and the best method of treating a carbuncle. Differentiate between a carbuncle and abscess.
9. Discuss focal infection as a cause of arthritis. Give treatment indicated in each cause mentioned.
10. Give differential diagnosis between inguinal hernia and hydrocele.

MINOR SURGERY.

1. Give causes and symptoms of supra-orbital neuralgia. Give treatment as to cure.
2. How would you treat a fracture of lower end of humerus with line of fracture running into joint?
3. Why is gonorrhoea in the female a more grave disease than in the male, and to what late danger does it expose the female? Treat a case of acute gonorrhoea in female.
4. Give in detail how you would wash out a bladder in case of cystitis. Give solutions and instruments used and precautions taken in their preparation.
5. What is a meibomian cyst? Give treatment.
6. Etiology, symptoms, diagnosis and

treatment of a cyst of Bartholin gland.
7. Give causes of lumbago and your methods of diagnosis.
8. Differentiate a Pott's fracture from sprain of the joint. Give treatment of sprain which lasts two weeks.
9. Causes of suppurating bubo. Give treatment.
10. Give symptoms of acute osteomyelitis and differential diagnosis. Indicate treatment.

MATERIA MEDICA, Junior Curriculum.
Dr. H. L. Shaw, Examiner.
November, 1916.

1. Name two circulatory stimulants, two depressants, and give dose of each.
2. Name two respiratory stimulants, two depressants, and give dose of each.
3. Name two cerebral excitants, two depressants, and give dose of each.
4. Name two Emmenagogues and give dose of each.
5. Give name and dose of an Anthelmintic for (1) Hookworm. (2) Round Worm. (3) Tapeworm. (4) Seat-worms.

THERAPEUTICS.
Senior Curriculum.

1. Typhoid fever:
   Diet, stimulants, special remedies, pyrexia, diarrhoea, constipation, tympanitis, hemorrhage from the bowels, perforation, delirium, insomnia, bed sores.
2. Lobar Pneumonia:
   Special treatment, pain, cardiac weakness, cough, fever, dyspnea, insomnia, delirium, delayed resolution.
3. Scarlet fever:
   Vomiting, fever, itching, throat symptoms, nephritis.
4. Acute tonsilitis:
   Local and internal treatment.
5. Scurvey, dietetic and medicinal treatment.
6. Asthma, treatment of the attack, preventive treatment.
7. Acute Diarrhoea in adults, diet and drugs to be used.
8. Chronic Constipation, dietetic and medicinal treatment.
9. Acute Endocarditis, hygienics and medicinal treatment.
10. Write a prescription for a vegetable tonic containing Tr. Nux Vomica, Tr. Capsicum and Co. Tr. Gentian, giving proper dosage.

CHEMISTRY. Junior Curriculum.
Dr. A. Earle Boozer, Examiner.
November, 1916.

1. What is Oxygen? To what use is it put in medicine and surgery?
2. What is sodium chloride? What is its function in the animal economy?
3. Define physical change and chemical change. Give familiar examples of each.
4. What constitute chemical incompatibality in drugs? Are chemical incompatibles used in medicine? Give examples.
5. In electrolysis of tumors, what needle should be inserted into them; which in aneurism and why?

URINALYSIS, MICROSCOPY, TOXICOLOGY & MEDICAL JURISPRUDENCE.
Senior Curriculum.

1. What class of acids would you give to acidify alkine urine? What drugs would you use to render the urine alkaline? Give examples of each.
2. What are the characteristics of the urine in (a) Diabetes, (b) Nephritis and (c) Cystitis?
3. What substances in the urine other

than glucose may produce the reaction of Fehling's test?

4. Describe bromism and state how it is produced?
5. How does an antagonist differ from an antidote? Give examples.
6. What are the symptoms and treatment of poisoning with Bichloride of Mercury?
7. How may Carbolic Acid poisoning be produced and how treated?
8. Define Malpractice.
9. State briefly the difference between idiocy and insanity.
10. In case of injury to spine how would you tell whether the paraplegia was real or feigned.

NOSTRUM ADVERTISING AND THE AGENCY LEVERAGE.

The ramifications of the fraudulent "patent medicine" business are many. The acceptance of advertising from such concerns by small country newspapers is not always an indiaction of a low ethical standard of advertising, at least not wholly so. One of the developments of modern business is the advertising agency, to which many concerns, instead of attempting to handle their own contracts, turn over their advertising business. These agencies place the advertisements in such publications as their special knowledge and judgment suggests will bring the best returns to their clients. Large agencies, having the power of dispensing advertising largess, naturally possess no little influence with publishers. Supposing, then, that the manager of a large agency is financially interested in a fraudulent "patent medicine" business whose advertising he handles—and there are some such cases. Suppose, further, that he submits an advertisement of the nostrum in which he is interested to a country newspaper publisher who tries to keep his advertising pages clean. If this country publisher rejects the "patent medicine" copy, he puts himself in the position of offending a man who has the power to send to him, or withhold from him, much reputable advertising business during the course of the year. As one of the big advertisers of the country has said: "Naturally publishers—particularly the little fellows—hesitate to offend a concern which sends to them so much business even though they hate to accept this particular kind of advertising." When next you feel like "jumping on" the publisher of your local paper because of some particularly flagrant nostrum advertisement, find out before you do so just how much economic pressure is being exerted, directly or indirectly, to make him accept such advertising—Journal of the American Medical Association, Feb. 3, 1917.

IPECAC.

Ipecac is the root of a Brazilian herb. It is said to have been in common use in its native country long before it was brought to Europe by Piso at about 1650. Shortly afterward a charlatan by the name of Adriaan Helvetius placarded Paris with the announcement that he had a cure for dysentery. Hearing of this, Louis XIV. summoned him to treat the dauphin, who was suffering from this disease. The patient recovered, and the formula, which Helvetius is said to have obtained from a physician in the Netherlands, was purchased by the government for 1,000 louis and made public. Ipecac was one of the ingredients of the formula, and from that day to our time Ipecac has been used as a remedy in dysentery, but with varying fortune, it being vaunted by some as a specific and condemned by others as useless. Under any circumstances the vomiting was a heavy drawback.—Journal of the American Medical Association, Feb. 3, 1917.

MEETING OF FIRST DISTRICT MEDICAL ASSOCIATION, HELD AT CHARLESTON, S. C., JANUARY 24TH, 1917.

The semi-annual meeting of the Association was held in the Auditorium of the Medical College of the State of South Carolina on Jany. 24th, 1917.

Meeting called to order by the President, Dr. L. M. Stokes, of Walterboro, S. C.

The Association was honored by having Dr. C. B. Earle, President of the South Carolina Medical Association, with them; Dr. Earle made a short address, which was greatly enjoyed by the members.

The following papers were read and freely discussed:

1. Pyelitis of Pregnancy; Dr. E. C. Baynard, Charleston, S. C.

2. Eclampsia & Cesarean Section; Dr. D. L. Maguire, Charleston, S. C.

3. Vaginal Cecarean Section; Dr. G. F. Wilson, Charleston, S. C.

4. The Eye of the Pregnant Woman; Dr. C. W. Kollock, Charleston, S. C.

5. The Preservation of the Perineum in Obstetrics; Dr. H. W. DeSaussure, Charleston, S. C.

6. Pre-Natal Care; Dr. Lane Mullally, Charlseton, S. C.

7. Nasal Obstruction as a Factor in Disease, Dr. W. P. Porcher, Charleston, S. C.

The following officers were elected for the ensuing year.

Dr. J. Sumter Rhame, of Charleston, President.

Dr. J. B. Johnston, of St. George, Vice President.

Dr. E. C. Baynard, of Charleston, Secretary-Treasurer.

After the meeting the members were guest of the Medical Society of South Carolina at dinner at the St. John Hotel.

The next meeting will be held in St. George, S. C., during July, 1917.

MEETING OF THE SECOND DISTRICT MEDICAL ASSOCIATION HELD IN BARNWELL, JAN. 30, 1917.

Meeting called to order 11:30 A. M.

Prayer—Rev. A. E. Evison, Barnwell, S. C.

Address of Welcome—Dr. R. A. Gyles, Blackville, S. C.

Response—Dr. L. A. Hartzog, Olar, S. C.

Paper—Auto-Intoxication.—Dr. J. S. Palmer, Allendale, S. C.

Paper—Blood-Transfusion—Dr. C. I. Bryans, Augusta, Ga.

Paper—Venereal Prophalaxis — Dr. M. H. Wyman, Columbia, S. C.

Business Session — Following Resolutions were passed.

"RESOLVED, that this Association favors the proposed resolutions of the committee on prevention of Venereal Diseases of the S. C. Medical Association, and that the Secretary be instructed to send a copy of this resolution to Dr. Neuffer, the author of the proposed Bill now before the Legislature."

"RESOLVED, that it is the sense of this body, the Second District Medical Association of S. C., in regular session at Barnwell, Jan. 30th, 1917, that we are in hearty sympathy and accord with efforts to have a State Wide Prohibition Measure enacted for South Carolina."

After adjournment dinner was served by the Barnwell County Medical Society to the visiting delegates.

This was one of the best attended and most interesting sessions that the Association has yet held. The Association is growing from year to year and is doing good work.

Respectfully,

Vance W. Brabham,

Orangeburg, S. C., Secretary.

Feb. 1st, 1917.

TREATMENT OF PSORIASIS.

To the Editor:—Has there been anything new and effective developed in the treatment of psoriasis? Can you advise me if the vaccine treatment is producing any favorable results?

F. H. Moore, M. D.,
Herkimer, N. Y.

Answer.—Various new methods have been proposed and tried more or less in the last few years, but none of them has proved of great value. In general, chrysorabin ointment still remains the most effective remedy for cleaning up psoriasis. The custom today is to use it in rather dilute strengths—from 2 to 5 per cent. chrysarobin in some ointment base. The lesions can often be cleaned up with Roentgen rays, but the mehtod is not to be recommended unless used with great caution. As a rule, the eruption recurs after Roentgen-ray treatment, as after all other methods of treatment. Another recent method of treatment is exposure to highly actinic rays of light. Sometimes ordinary sunburning will clear up psoriasis, and exposure to ultraviolet light may do the same thing; but as a rule this method of treatment is disappointing. Autoserotherapy is the latest method suggested, but it has not yet been proved of value. The same can be said of the treatment of psoriasis with vaccines.—Journal of the American Medical Association, Feb. 3, 1917.



Diathermy

A High Frequency modality which is purely thermic in character (being free from electrolysis and contracture.)

A comparison of diathermy with other thermic agents conclusively demonstrates it to be a specific for deep seated heating effects.

Diathermy will heat any part of the anatomy uniformly through up to a maximum of 110 degrees Fahrenheit therapeutically, and up to the point of coagulation surgically.

The technic of application is exceedingly simple.

Clinical Data on Request

Victor Electric Corporation
Chicago - New York - Cambridge

Manufacturers of

A complete line of x-ray and electro medical apparatus.

We have a Service Station in your vicinity.
Address inquiries to 236 S. Robey Street
Chicago



The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, $2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.
J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.
WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital, Boston, Mass.

OBSTETRICS AND GYNECOLOGY.
ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY
M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.
G. T. TYLER, M. D., Greenville, S. C.
R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.
J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.
E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

PROVISIONAL PROGRAM MEETING SOUTH CAROLINA MEDICAL ASSOCIATION SPARTANBURG, S. C., APRIL 17, 18, 19th.

Wednesday, 10:30 A. M.

Invocation—Rev. J. W. Frazer, Pasto Central Methodist church.

Address of Welcome—Dr. J. E. Edwards, President Spartanburg County Medical Society.

Address of Welcome—Mayor J. F. Floyd.

Social Features:

Tuesday, 9:30 P. M.—Smoker to House of Delegates, Cleveland Hotel.

Wednesday—Ball Room Cleveland Hotel.

8:30 P. M. Motion Picture of War Surgery.

9:15 Concert.

10:00 Reception.

Thursday, 4 P. M.—Converse College Auditorium, Childrens' Chorus.

8:30 P. M.—First Baptist Church: Public Address, Dr. Rochelle Yarros.

Address: Dr. John G. Bowman, Director of the American College of Surgeons.

1. Perforating Duodenal Ulcers With Case Reports.—Dr. J. H. Taylor, Columbia, S. C.
2. A Post Graduate Course in Anatomy at Home.—Dr. W. F. R. Phillips, Charleston, S. C.
3. Surgical Experience in a German Military Hospital.—Dr. R. H. Crawford, Rock Hill, S. C.
4. Psychiatry and the General Practitioner.—Dr. William C. Sandy, Columbia, S. C.
5. Ectopic Pregnancy.—Dr. J. C. Harris, Anderson, S. C.
6. Some Observations from Twenty-

Eight Cases of Broncho-Esophogoscopy.—Dr. E. W. Carpenter, Greenville, S. C.

7. Nasal Obstruction as a Factor in the Production of Disease.—Dr. W. P. Porcher, Charleston, S. C.
8. The Value of X-Ray in the Diagnosis of Incipient and Border Line Cases of Tuberculosis, With Report of Cases.—Dr. W. F. Ashmore, Anderson, S. C.
9. Complications of Nose and Throat Disease.—Dr. J. F. Townsend, Charleston, S. C.
10. The Diagnosis of Urinary Lithiasis.—Dr. N. B. Edgerton, Columbia, S. C.
11. The Roentgen Diagnosis of Chronic Appendicitis, Lantern Slides.—Dr. A. R. Taft, Charleston, S. C.
12. The Ear in Phenomenal and Secondary Relationship.—Dr. Newton T. Clark, Campobello, S. C.
13. Chronic Surgical Dyspepsia.—Dr. H. R. Black, Spartanburg, S. C.
14. Whom Should We Seek to Bring Into the Medical Association and and Why?—Dr. E. W. Pressley, Clover, S. C.
15. Local Anesthesia in Major Surgery.—Dr. J. H. Johns, Westminster, S. C.
16. The Treatment of Fractures of the Elbow.—Dr. E. C. Doyle, Seneca, S. C.
17. A Way to Cure the Child of Enteric Infection, Accompanied by Greenish Stools.—Dr. L. F. Robinson, Greenville, S. C.
18. Medical Aspects of the Social Hygiene Movement.—Prof. Rachelle S. Yarros, University of Illinois, Chicago, Ill.
19. Auto-Serum in Arthritis, as used by the Author.—Dr. William R. Barron, Columbia, S. C.
20. Improvement of Rural Obstetrics with Special Reference to the Elimination of the Midwife.—Dr. G. F. Klugh, Cross Hill, S. C.
21. Bringing the Post Graduate Course in Pediatrics to the Practitioner.—Dr. R. M. Pollitzer, Boston, Mass.
22. Cysts of Pancreas.—Dr. J. R. Sparkman, Columbia, S. C.

Symposium on Infant Mortality.

23. Infant Morbidity and Infant Mortality in South Carolina.—Dr. E. A. Hines, Seneca, S. C.
24. Birth Registration and Maternal Mortality in South Carolina—Dr. J. A. Hayne, Columbia, S. C.
25. Prenatal Care.—Dr. W. P. Cornell, Charleston, S. C.
26. A State Wide Plan for Maternal and Infant Welfare.—Dr. William Weston, Columbia, S. C.
27. Laxatives in Infants and Children.—Dr. D. Lesesne Smith, Spartanburg, S. C.
28. Tendon Surgery With Case Reports.—Dr. Carl B. Epps, Sumter, S. C.
29. The Medical Treatment of Duodenal Ulcer.—Dr. John W. Parker, Greenville, S. C.
30. A Discussion of Some of the Predisposing Influences of Nervous and Mental Diseases.—Dr. J. F. Munnerlyn, Columbia, S. C.
31. Medical Examination of the school Children of the City of Florence, S. C.—Dr. M. R. Mobley, Florence, S. C.
32. Clinical and Laboratory Findings in Duodenal Ulcer.—Dr. T. R. W. Wilson, Greenville, S. C.
33. Reminiscences of Forty-Nine Years' Practice.—Dr. L. B. Bates, St. Matthews, S. C.
34. Health Education in Rural Communities.—Dr. L. A. Riser, Columbia, S. C.
35. The Report of a Series of Three Hundred Cases of Cataract Opera-

tion with Remarks.—Dr. Charles W. Kollock, Charleston, S. C.

36. Gall Bladder Surgery.—Dr. A. E. Baker, Charleston, S. C.
37. Infantile Paralysis: Its After Treatment.—Dr. William A. Boyd, Columbia, S. C.
38. Prostate: Medically and Surgically Considered.—Dr. M. H. Wyman, Columbia, S. C.

THE CALL TO SPARTANBURG.

This issue of the Journal is pre-eminently a Spartanburg number and we wish here to record our appreciation of the Assistance of the Chamber of Commerce of that thriving city, also we are grateful to the county Medical Society for hearty co-operation in securing data not otherwise obtainable. We are confident the membership will read this Journal with more than ordinary interest.

The important fact though is that another year has rolled around and we are called to meet again in annual convention. The prospects are for a large attendance. Our Association enrolls the greatest number in its history. The activitieso f most of the constituent societies the past year indicate an increase in scientific papers, which will culminate at Spartanburg in a highly attractive program.

The Scientific Committee, The Committee of Arrangements, the President and Secretary have worked together to present an unusually instructive program from a scientific standpoint. There was some apprehension expressed by a few members that the possibility of the music festival meeting at the same time would interfere with our meeting. Such will not be the case. They will not meet on the same dates.

The magnificent new Cleveland Hotel will provide ample facilities for our comfort and convenience.

We have planned some innovations for this meeting in the nature of exhibits. We expect the State Board of Health and the Medical College of the State of South Carolina to materially help out our program along this line.

The provisional program is presented in this issue, which of course will be rearranged and amplified for the final program. Enough titles appear here to assure us of material to keep the Association busy.

We note that some years the discussions are very poor, again every one goes away feeling that the discussions have alone compensated for attendance. We appeal to our members to make those features the very best this year. To do this the program should be studied carefully, long before hand and certain papers selected to discuss. Close attention to the reader and a keen general interest in the particular subject will lead to a helpful discussion.

DEATH OF DR. JOHN L. DAWSON OF CHARLESTON.

In the death of Dr. John L. Dawson, Feb. 20, 1917, the South Carolina Medical Association loses one of its truest, most loyal and eminent members. Early in his professional life, probably only a year or two after his graduation from the Medical College of the State of South Carolina he was elected Recording Secretary of the South Carolina Medical Association. He served in this capacity 1885 to 1889 inclusive. Dr. Dawson was again honored by the State Association in 1909 when he was elevated to the Presidency. For a number of years he served as a delegate to the American Medical Association. Dr. Dawson was not a voluminous writer, but his contributions always bore the ear marks of wide experience and learning. We note herewith some of

the products of his pen, so far as the State Association is concerned. In 1897 he presented a paper on Graves Disease.

In 1900 a paper on The Grip Lung.

In 1905 he presented a notable paper on the subject of, A Plea for State Sanatoria for Tuberculous Patients.

In 1910 his Presidential address was a masterpiece and was widely quoted within and without the State. The subject was, The Need of Better Education in the Preparation for the Study of Medicine.

In recent years we see the fruit of Dr. Dawson's efforts. Medical education in this State has advanced in a marvelous manner. Also the State of South Carolina has established a Sanatorium for the care of Tuberculous Patients. Dr. Dawson was a lovable character and had a wide circle of friends both within and without the profession. Perhaps his most signal service in medicine was rendered through the Medical College of the State of South Carolina, and we extract from the News and Courier a tribute paid by Dr. Robert Wilson, Jr., Dean of the College as follows: "Dr. Dawson in 1890, prior to which time he served as demonstrator of anatomy, became the professor for the principles and the practice of medicine, which position he occupied until his failing health made it necessary for him to resign.

When the college was reorganized a few years ago, Dr. Dawson was reelected as professor of the principles and practice of medicine by the board of trustees. Two years ago upon relinquishing active service, he was elected as emeritus, professor of medicine. Undoubtedly he was a brilliant lecturer, always clear and forceful in the presentation of his subject, and as a clinical teacher, has rarely been excelled. Dr. Dawson was a man of broad culture and extensive learning. My acquaintance with him began in 1889, when I first started to study medicine, and he was a demonstrator of anatomy. Subsequently as a student of medicine, I learned to admire his splendid abilities. In later years I served under him as an instructor in his department. A warm friendship sprang from the close associations of this period. Hundreds of physicians throughout this State and country are better doctors because Dr. Dawson taught them, and bear him in loving and grateful remembrance as a teacher. In the last few years when he was unable to carry on his active duties as a professor in the college, he continued to give counsel as a member of the advisory board of the faculty. He took a lively interest in the Society organized by the students, and which was named in his honor The John L. Dawson Clinical Society. He will be greatly missed by the faculty and by the students of the Medical College of South Carolina."

AN ACT TO REGULATE THE PRACTICE OF OPTICIANS AND OPTOMETRISTS FOR SOUTH CAROLINA.

Section 1. Practice of Optometry Defined.—Be it enacted by the General Assembly of the State of South Carolina, Any person shall be deemed to be practicing optometry within the meaning of this Act who shall display a sign, or in any way advertise as an optician or optometrist, or who shall employ any means, other than the use of drugs, for the measurement of the powers of vision, or the adaptation of lenses, for the aid thereof, or who shall in the sale of spectacles or eyeglasses or lenses, use in the testing of the eyes therefor, lenses other than lenses actually sold.

§ 2. **Unlawful to Practice Optometry Without Certificate of Registration.**—It shall be unlawful for any person to engage in the practice of optometry or as an optician in the State of South Carolina unless such person shall have obtained a certificate of registration from the South Carolina State Board of Examiners of Opticians and Optometrists, as hereinafter provided.

§ 3. **Board of Examiners.**—There is hereby created a Board whose duty it shall be to carry out the purposes and enforce the provisions of this Act and shall be styled the South Carolina Board of Examiners of Opticians and Optometrists.

§ 4. **Composition of Board—Term—Qualifications.**—The said Board shall consist of six members, of whom three shall be members of and nominated by the South Carolina Optical Association, and the President and Secretary of the State Board of Medical Examiners shall be ex officio members, who shall have full power to vote on all questions, and one occulist, who shall be nominated by the South Carolina Medical Association. The term of each appointed member shall be four years, or until his successor is appointed and qualified, and vacancies shall be filled for the unexpired term only; but in the original appointment of the members of the Board, one shall be appointed for the term of one year, one for two years, one for three years, and one for four years, said Board shall be commissioned by the Governor of this State within thirty days after this Act shall become effective and annually thereafter as vacancies occur. The Governor shall have power to remove from office any member of said Board for incapacity, misconduct or neglect of duty. No member of said Board shall be a stockholder, member of the faculty or on the Board of Trustees of any school of optometry, or financially interested in a manufacturing or wholesale optical house.

§ 5. **Meetings and Powers of Board.**—The members of said Board shall qualify by taking oath of office before a Notary Public, or other officer empowered to administer oaths in the county in which each one, respectively, resides. At the first meeting of said Board after each annual appointment, the Board shall elect a president, vice-president and secretary-treasurer. A majority of members of the Board shall constitute a quorum. Regular meetings shall be held at least once a year, at such time and place as shall be deemed most convenient. Due notice of such meetings shall be given by publication in such papers as may be selected by the Board. Special meetings may be held upon a call of three members of the Board. The Board may prescribe rules, regulations and by-laws, fix the salary of the secretary-treasurer, employ attorneys or offer rewards for the conviction of persons violating this Act, for its own proceedings and government, for the examination of applicants for the practice of optometry. Said Board, or any member thereof, shall have the power to administer oaths for all purposes required in the discharge of its duties, and shall adopt a seal to be affixed to all of its official documents.

§ 6. **Examination of Applicants—Fee—Certificate.**—Every person before beginning to practice optometry in this State after the passage of this Act shall pass an examination before said Board of Examiners in theoretic, practical and physiological optics, theoretic and practical optometry and in the anatomy of the eye. Every person before beginning the work as an optician in this State after the passage of this Act shall pass an examina-

tion before the said Board in Light Theory, Transportation and Neutralization of Lenses, Service Grinding and Edging, Frame Measuring, and Adjusting. Any person desiring to be examined by said Board must fill out and swear to an application furnished by the Board at least two weeks prior to the holding of an examination. Each applicant, on making application, shall pay to the Secretary of the Board a fee of ten dollars. All persons successfully passing such examination shall be numbered and registered in the Board Register, which shall be kept by the Secretary, as licensed to practice optometry or as an optician, and shall receive a certificate of such registration, to be signed by the President and Secretary of the Board, upon payment to the Secretary of the Board of the sum of five dollars, which said sum shall be for use of said Board.

§ 7. Admission to Practice Without Examination—Fee—Right of Appeal.—Every person who shall submit to said Board of Examiners satisfactory proof as to the character, competency and qualifications, and that he is a bona fide resident of this State and has been continuously engaged in the practice of optometry or as an optician in this State for more than two years prior to the passage of this Act, shall, on or before October 1st, file an affidavit in proof thereof on blanks furnished by the said Board, who shall make and keep a record of such person, and shall, in consideration of the sum of ten dollars, issue to him a certificate of registration per exemption. Any applicant for certificate of registration being denied such certificate, or any person feeling himself aggrieved by the action of said Board, will have the right of appeal to the Court of Common Pleas.

§ 8. Certificate of Exemption—Wavier—Record.—All persons entitled to a certificate of registration under the provisions of Section 7 shall be exempt from the provisions of Section 6 of this Act, also every person entitled to a certificate of exemption as herein provided, must make application therefor and present the evidence to entitle him thereto, on or before October 1st, as allowed by law, or he shall be deemed to have waived his right to such certificate. Before any certificate is issued, it shall be numbered and recorded in a book kept by the Secretary of the Board of Examiners, and its number shall be noted upon the certificate. In all legal proceedings the record so kept in the office of the Secretary of the Board, or certified copies thereof, shall be prima facie evidence of the facts therein stated.

§ 9. Recordation of Certificates—Penalty.—All recipients of said certificates of exemption or registration shall present the same for recording to the Clerk of the county in which they reside, and shall pay a fee of fifty cents to the Clerk for recording the same. Said Clerks shall record said certificate in a book provided for that purpose. Any failure, neglect or refusal on the part of any person holding such certificate of registration to display or record the same, as herein provided, for three months after the issuance of said certificate, shall ipso facto work the forfeiture of his certificate of registration, and it shall not be restored except upon the payment of twenty-five dollars to the Board of Examiners.

§ 10. Certificate to Be Displayed.—Every person to whom a certificate of registration or exemption is granted under this Act shall display the same in a conspicuous place in his principal office, place of business, or employment.

§ 11. Compensation of Members of Board—Disposition of Funds.—Out of the funds coming into possession of

said Board, each member may receive as compensation the sum of five dollars and expenses for each day actually engaged in the duties of his office, and mileage at three cents per mile for all distances necessarily traveled in going to and from the meetings of the Board. Said expenses shall be paid from the fees and licenses received by the Board under the provisions of this Act, and no part of the salary or other expenses of the Board shall ever be paid out of the State treasury. All money received in excess of said per diem allowance and mileage, as above provided for, shall be held by the Secretary and Treasurer as a special fund for meeting the expenses of said Board and carrying out the provisions of this Act, and he shall give such bond as the Board shall from time to time direct, and the said Board shall make an annual report of its proceedings to the Governor on the first Monday in January of each year, which report shall contain an account of all moneys received and disbursed by them pursuant to this Act.

§ 12. Annual Registration Fee—Procedure in Case of Default in Payment —Penalties.—Every registered and exempt optican and optometrist who desires to continue the practice in this State, shall annually, on or before the first day of October of each year, pay to the Secretary of the Board a registration fee, to be fixed by the Board, and which in no case exceeds the sum of five dollars per annum, for which he or she shall receive a renewal of such registration, and in case of the default of such payment by any person his or her certificate shall be revoked by the Board of Examiners on twenty days' notice, in writing by the Secretary, of the time and place of considering such revocation, and the deposit of said notice in the U. S. Post Office addressed to the person at his or her last known place of residence or business, and the registered postage prepaid thereon shall be due and legal service of such notice, but no certificate shall be revoked for non-payment if the person so notified shall pay such penalty as may be imposed by said Board: Provided, That the said Board may impose a penalty not exceeding ten dollars upon persons so notified as a condition allowing certificates to stand valid. Any person whose certificate of registration has been revoked for failure to pay his or her renewal fee, as herein provided, may apply to have the same regranted to him or her upon payment to the Board of all renewal fees that should have been paid had the certificate of registration not been revoked, together with the penalty of tweny-five dollars.

§ 13. Revocation of or Suspension of Certificate — Grounds — Notice to Party—Hearing—Reissuance of Certificate.—Any person registered as provided for in this Act may have his or her certificate of registration revoked or suspended by the South Carolina State Board of Opticians and Optometrists for any of the following causes: (1) His or her conviction of a felony or misdemeanor involving moral turpitude, in which case the record of conviction or a certified copy thereof certified by the Clerk of Court or by the Judge in whose Court the conviction is had, shall be conclusive evidence. (2) When their certificate of registration has been secured by fraud or deceit practiced upon the Board. (3) For unprofessional conduct or for gross ignorance or inefficiency in his profession. Unprofessional conduct shall mean employing what are known as "Cappers," "Peddlers," or "Steerers" employing directly or indirectly any suspended or unlicensed optican or optometrist to perform any work covered by this

Act, the advertising of an optical business or treatment or advice in untruthful, improbable or impossible statements are made, or habitual intemperance or gross immorality. (4) When the holder is suffering from a contagious or infectious disease: Provided, however, That before any certificate shall be revoked or suspended, the holder thereof shall have notice, in writing, of the charge or charges against him or her, and at a date specified in said notice, at least five days after the service thereof, be given public hearing, and have an opportunity to produce testimony in their favor and confront the witnesses against him or her. Any person whose certificate has been suspended may, after expiration of ninety days, apply to have the same regranted, and the same shall be regranted him or her upon a satisfactory showing that their disqualification has ceased.

§ 14. Premiums Forbidden. — It shall be unlowful for any person or persons to offer or give as a premium, with newspapers, books, magazines or merchandise, or in any other manner to induce trade, eyeglasses, spectacles or lenses.

§ 15. Violation of Act a Misdemeanor—Penalty.—Any person who shall violate the provisions of this Act shall be deemed guilty of a misdemeanor, and, upon conviction in a Court of competent jurisdiction, be punished by a fine of not less than twenty-five dollars and not exceeding one hundred dollars, or by imprisonment not less than twenty days and not exceeding thirty days, all fines thus received, one-fourth to be paid party or parties furnishing proof necessary to convict, three-fourths to go to the common schools fund in the county in which the conviction takes place.

§ 16. Magistrates to Have Jurisdiction—Duty of Solicitors, Sheriffs and Constables. — All Magistrates shall have jurisdiction of violations of this Act. It shall be the duty of the respective Solicitors to prosecute all violations of this Act, and it shall be the duty of Sheriffs and Constables to report any violations of this Act to the Secretary of the South Carolina State Board of Examiners, and render such assistance to the Board or an officer as may be called on to perform.

§ 17. Not Applicable to Certain Physicians or Established Opticians—Applicable to Peddlers—Proviso as to Holders of Certificates.—Nothing in this Act shall be construed to apply to physicians authorized to practice under the laws of the State of South Carolina, nor to persons who sell spectacles or eyeglasses as merchandise from a regular established place of business, but does apply to those commonly called peddlers, who solicit from house to house in cities and counties: Provided, The provisions of this Act shall not be construed to prevent persons who hold certificates from practicing from town to town, or from house to house, or place to place.

§ 18. When Optometrist Shall Not Use Prefix "Doctor."—Any person practicing optometry shall be prohibited from using the prefix Doctor to his name, unless he has received a degree from a duly authorized college authorized to grant the title.

§ 19. Minor Not to Be Granted Certificate.—It shall be unlawful for the Board of Examiners to grant a certificate to any one in the State of South Carolina under legal age.

§ 20. Immediately Effective.— This Act shall go into effect immediately upon approval by the Governor.

§ 21. Inconsistent Acts Repealed.— All Acts and parts of Acts inconsistent with this Act are hereby repealed.

Approved the 13th day of February, A. D. 1917.

RICHARD I. MANNING,
Governor.

STATE OF SOUTH CAROLINA
Executive Department

By the Secretary of State.

This is to certify the foregoing typewritten copy of an Act "To regulate the practice of opticians and optometrists for South Carolina," to be true and correct as taken from and compared with the original now on file in this office.

Given under my hand and the seal of the State, at Columbia, this the 14th day of February, A. D. 1917.

(Seal) W. BANKS DOVE,
Secretary of State.

COMMITTEES.

On Revision Medical Practice Act.

A. E. Boozer, Chm'n. Columbia, S. C.
C. F. Ross .....Anderson, S. C.
J. S. Matthews .....Denmark, S. C.

On Public Policy and Legislation.

Julius H. Taylor, Chm'n. Columbia, S. C.
J. LaBruce Ward .....Columbia, S. C.
E. C. Doyle .....Seneca, S. C.

On Prevention of Venereal Diseases.

M. H. Wyman, Chm'n. Columbia, S. C.
E. C. Baynard .....Charleston, S. C.
C. A. Mobley .....Rock Hill, S. C.

On Necrology.

G. P. Neel, Chm'n. ..Greenwood, S. C.
J. C. Lawson .....Darlington, S. C.
J. P. Johnston .....St. George, S. C.

On Scientific Work.

C. C. Geer, Chm'n. ...Greenville, S. C.
E. A. Hines, ...Seneca, S. C.
K. M. Lynch .....Charleston, S. C.

On Hospital Standardization and Efficiency.

Robert Wilson, Jr., Chm'n.....
.....Charleston, S. C.
S. C. Baker .....Sumter, S. C.
E. A. Hines .....Seneca, S. C.

On Study and Prevention of Tuberculosis.

N. B. Edgerton, Chm'n. Columbia, S. C.
L. E. Bull .....Cheraw, S. C.
R. A. Marsh .....Edgefield, S. C.

On Public Instruction and Health.

William Weston, Chm'n.....
.....Columbia, S. C.
L. Rosa H. Gantt ...Spartanburg, S. C.
G. McF. Mood.....Charleston, S. C.

On Sim's Memorial.

S. C. Baker, Chm'n. ....Sumter, S. C.
C. W. Kollock .....Charleston, S. C.
E. A Hines .....Seneca, S. C.

On Norwood Memorial.

F. A. Coward, Chm'n. Columbia, S. C.
C. C. Gambrell .....Abbeville, S. C.
G. A. Neuffer .....Abbeville, S. C.

Medical Education.

Heyward Gibbes, Chm'n. .....
.....Columbia, S. C.
G. A. Neuffer .....Abbeville, S. C.
J. F. Kinney .....Bennettsville, S. C.
H. E. McConnell .....Chester, S. C.
R. T. Ferguson .....Gaffney, S. C.

PREPAREDNESS AND ORGANIZED MEDICINE.

It is clear that the organized medical profession will be called upon to render conspicuous service to our country in the event of war. The members of the S. C. M. A. stand ready to respond to any call we feel assured. Already the State Committee has forwarded to the proper authorities much data for future reference.

The State Committee on Red Cross has been appointed as follows:

Dr. Heyward Gibbes, Columbia, S. C.
Dr. R. S. Cathcart, Charleston, S. C.
Dr. C. B. Earle, Greenville, S. C.
Dr. E. A. Hines, Seneca, S. C.
Dr. LeGrand Guery, Columbia, S. C.
Dr. C. W. Kollock, Charleston, S. C.
Dr. Lane Mullally, Charleston, S. C.
Dr. W. W. Fennell, Rock Hill, S. C.
Dr. Ed. Rutledge, Charleston, S. C.

This committee will have charge of organizing Red Cross activities in the various county societies and otherwise become the medium through which the National Red Cross will work.

LADIES INVITED TO SPARTANBURG MEETING.

The splendid success of the proposition to invite the ladies to attend the Charleston meeting last year encouraged the officers and enertainment committee to expect greater things this year. This feature is a fixture with many state associations, and is especially so with the A. M. A. Why not make it permanent with the S. C. M. A.? The entertainment committee of the Spartanburg Society assures us that arangements are well under way for giving the ladies a royal good time. Let us not disappoint them but urge the attendance of our wives, daughters and sweethearts.

PAPERS PROMISED SUFFICIENT.

The number of papers on the provisional program will be sufficient to keep the association busy for two days. There will doubtless be others offered but we wish to warn the contributors that every one should endeavor to present his paper in as brief a form as practicable in order that all may have an opportunity to be heard and especially to inspire discussion. Fifteen minutes is long enough for almost any paper. Even at that forty papers will take up ten hours of continuous reading.

HOTEL RATES FOR SPARTANBURG MEETING.

Hotel Cleveland is Headquarters and the rates are as follows: Rooms with connecting bath $1.50, $2.50, and $3.00 private, per person, European plan.

Gresham Hotel, both European and American, rooms without bath $1.00. Rooms with bath $1.25, $1.50 and $2.00. All meals fifty cents each with room or American plan.

Finch Hotel, $2.50, $3.00 and $3.50 American. $1.00, $1.50 and $2.00 European.

Dr. Baxter Haynes is Chairman of the Hotel Committee and will be glad to serve the members of the Association.

DIPHTHERIA.

One of the greatest achievements of modern medicine is the giving to the world of a specific antitoxin for the cure of diphtheria. It is an old story and one well known that the mortality in hospitals has been reduced from 43% to 8%.

Naturally, the question arises, why is the death rate not lower? There are several points to be considered. Some cases do not die from toxemia but directly or secondarily from mechanical obstruction as in the laryngeal type. However, even here the progress of the disease can be arrested and prevented from reaching a serious stage.

The average general practitioner who sees but a few cases of diphtheria a year has no idea of the relatively large number of hopeless cases that enter a contagious hospital.

There one is almost daily impressed with the fact that though this disease early is one of the most curable, yet late in serious cases, all the skill and science at our command is of little avail. The family often, but the attending physician oftener, is responsible for the fatal delay. Several times in the past few weeks this story has been told me:

After a day or two of slight sore throat the doctor was called. Unfortunately the pain usually is slight. Up-

on examination and after giving a prescription, he advised that the temperature be taken and if it rose he should be notified. It did not rise, and though the throat was still affected there was little systemic disturbance; in fact the patient felt better on the fourth day. In one case I know of he was called again on the fourth day and because the throat was not typical of diphtheria he merely took a culture. The next day, the culture proving positive, the little patient was sent to the hospital. Notwithstanding the immediate injection of a large dose of antitoxin death ensued two days later from myocarditis. This tragedy with variations occurs again and again.

"Of 1047 successive cases of clinical diphtheria substantiated by culture at the South Dept. (Boston City Hospital) the mortality was as follows:"

Where antitoxin was given on the 1st day the death rate was 0.%

Where antitoxin was given on the 2d day the death rate was .78%.

Where antitoxin was given on the 3d day the death rate was 5.85%.

Where antitoxin was given on the 4th day the death rate was 9.09%.

Where antitoxin was given on the 5th day the death rate was 14.54%.

In laryngeal cases the figures are of the same character being 0.% on the 1st day and 22% on the 5th.

The following facts are known to us but their significance often lost sight of:

The toxin is rapidly absorbed from the local lesion and carried by the blood to tissues with which it has a specific affinity. Even after the toxin tissue union has occurred, by the administration of sufficient antitoxin before a certain time (probably the 3d day) disassociation may occur. Later than this only the toxin circulation in the blood is neutralized. Toxin is rapidly absorbed while antitoxin having larger molecules travels slowly.

All this being interpreted means, to get the full value from antitoxin it should be given early and in one dose sufficiently large. It is far preferable to give one dose early than several late. In order to lessen the mortality by curing our patient we must treat the cases soon enough. This necessitates an early diagnosis. It is never a mistake to take a culture for bacteriological examination in a pharyngitis or tonsillitis, or if this is impracticable or the case is clinically diphtheric to administer antitoxin.

Few of us pay sufficient attention to a discharging nose. The presence of a bloody discharge with excoriation or a membrane on the septum can be detected in a few minutes. These cases, while not often serious to the individual, are frequently the spreaders of the disease.

Though the profession realizes the possible seriousness of a croupy cough and the frequent associated aphonia, yet the laity often bury their babies because of their ignorance.

Not until the public and the doctor are taught to regard all sore throats as dangerous will the mortality be diminished.

R. M. P.

REFERENCES:

Osler & McRae, Modern Medicine, Vol. I. Article, Diphtheria.

SPARTANBURG

TO THE MEDICAL PROFESSION OF SOUTH CAROLINA

Spartanburg extends to you a most cordial welcome for your annual meeting to be held here April 17, 18, 19th next. The city will be turned over to you, and we feel sure your sojourn with us will be both pleasant and profitable. It is an honor to have you.

J. F. Floyd, Mayor.
Ben Hill Brown,
Pres. Chamber of Com.
Spartanburg, S. C.,
March 1st, 1917.

SPARTANBURG.

Spartanburg, many miles from navigable waters, is one of the most popular cities of South Carolina, showing an increase in population of 53.07 per cent. in the years from 1900 to 1910, and of 215.96 per cent. in the twenty years from 1890 to 1910, which was at a much greater rate than that of any other city of the state. (From address of Fairfax Harrison, President of Southern Railway).

Population.

The 1910 census of the United States placed Spartanurbg in third position, with reference to South Carolina cities, with a population of over 17,000. The last Government estimate gives a population of approximately 22,000. It is the county seat of the most populous county in South Carolina, nearly 100,000 people residing within her borders.

Situation.

Situated in the foot hills of the Blue Ridge mountains, in the famous Piedmont section, and destined by nature for greatness in Industrial and Agricultural achievements, Spartanburg is living up to her opportunities. No town in the Southeast enjoys superior railroad facilities, in fact Spartanburg is the only point between Washington and Atlanta with two first class lines through the Blue Ridge and Appalachian Mountains to the Middle West.

Spartanburg is on the main North and South line of the Southern railway, reaching from Washington to Atlanta, and on the connecting line between Cincinnati, through Columbia to Charleston; on the Carolina, Clinchfield & Ohio railroad, which taps the rich coal fields of the Clinchfield section; on the Charleston & Western Carolina and the Piedmont & Northern, the latter an electric power system reaching from Spartanburg to Anderson, Greenville and Greenwood. These transportation lines give direct connection for both freight and passenger service to all important points in all directions, and the electrical interurban road makes the region tributary to the city practically a suburb.

The city is elevated 816 feet above tide water. The climate is temperate, being moderated by its altitude in summer and bracing in winter. There are no climatic extremes. There are no malarial conditions, the mortality rate is very low and general health conditions are most favorable.

Spartanburg is metropolitan in appearance, the greater part of the business section having been built in the last 20 years, of brick and along modern construction lines. The streets are well paved and well kept, and the general bustling activity of the entire



MAIN STREET

business section is indicative of a large volume of trade, not only in local demands, but for suburban requirements. ments.

Investments.

Within a radius of 50 miles, surrounding the city, there is a population of over 500,000 and an investment of over $7,000,000 in electrical plants, developing 70,000 horse power with 80,000 more available. There are in this territory investments in textile manufacturing plants aggregating $55,000,000, with 77,000 looms and 3,500,000 spindles.



MAIN STREET

Great Textile Industry.

The development of the textile manufacturing interests in Spartanburg and immediate tributary territory has been phenomenal in the past 15 years. There are in Spartanburg county 26 cotton mill organizations which operate 38 mills with 813,184 spindles and approximately 25,000 looms. Sixteen million dollars is invested and the plants give employment to over 10,000 people. These mills consume more than 100,000 bales of cotton annually, with yearly production of about $13,000.000.

The total investment in industrial enterprises in this county is the second largest in the State, being nearly $20,000,000, with an output of $15,000,000, distributing wages to operatives of nearly $3,000,000 yearly.

Among Spartanburg's prosperous industries are textile plants, hosiery plants, foundries, bagging and tie works, oil mills, four fertilizer plants, cigar factory, harness factory, candy factory, wagon and buggy factory, pump works, roller bearings factory, garment factory, wood working plant, several large garages, wholesale and retail bakeries and a co-operative creamery.

Banks.

Spartanburg's financial institutions include eight banks, their capital, surplus and undivided profits aggregating $1,833,000, with deposits of $3,200,000. These, with twelve other county banks, handle the financial interests of a county population of about 100,000 people.

Tax Values.

The total taxation value of city property in 1915 was $7,743,437, an increase of more than 100 per cent. since 1905.

The total taxable county property value in 1915 was $20,725,442, an increase of about 50 per cent. since 1905.

Electric.

There are over twenty miles of electric street railroad for city and suburban service in operation, and Spartanburg is connected by electric railroad with Greenville, Anderson and Greenwood, a total of 89 miles, with extension to Charlotte contemplated. An abundance of electricity for both light-

ing and power is furnished by two large companies—the South Carolina Light, Power and Railways Company and the Southern Power Company. These two companies now furnish electric power to about all the important cotton mills and other manufacturers in the territory.



CLEVELAND HOTEL

Hotels.

The city offers the traveling public every convenience and comfort in the way of hotel accommodation. Among the larger hotels are the Finch, the Gresham and the new Cleveland. Among the smaller ones are the Clinchfield, the Piedmont and the Sloan, besides numerous boarding houses.

The new Cleveland, which has just thrown its doors open to the public, is the last word in hotel construction. It is of steel and concrete construction, with six stories and basement, and includes every modern and up-to-date device for the comfort and protection of its guests. This hotel is a monument to the co-operation of the business interests of Spartanburg. It was conceived during the depressed period of 1915 and carried into execution by local capital with the characteristic enthusiasm of Spartanburg. This hostelry is capable of entertaining large conventions, as it is provided with a magnificent ball room and assembly hall on the sixth floor. The furnishings of this hotel have been selected with great care and exceptional taste, and no expense has been sparde in making it elegant in all respects. The new Cleveland, costing $280,000, is in a class with the best hotels in the larger cities and has no superior in South Carolina.

Besides the hotels there are two modern apartment houses, the Zabel Flats and the Hertzog Apartments, where comfortable home surroundings are furnished those desiring to remain in the city for some length of time. These apartments are situated in the best residential section of the city.

Historical.

Spartanburg county was originally part of the old Ninety-Six district, comprising then what is now Edgefield, Abbeville, Newberry, Laurens Union and Spartanburg counties. The county was formed by an act of the South Carolina legislature passed in 1785. The name of the county is a memorial to the old Spartan regiment, organized in 1775 b Col. John Thomas and active in the War of Independence. This entire section of the State was ceded to the whites by treaty between Gov. Glenn and the Cherokee Indians in 1755, and at that time the entire white population of the section consisted of eight to ten families, most of them early settlers from Virginia. It was not until after the close of the Revolutionary War that settlers from the coast regions came to this secion in numbers.

Schools and Colleges.

While Spartanburg has been famed for years as the leading cotton manufacturing county of the South, and has shown marked progress along all in-

dustrial lines, the foundation of her present greatness was laid in the establishment of Wofford College, Converse-College and the public school system. Adequate provision was then made for the "manufacture" of a first-class citizenship, and upon educational foundation alone can a stable superstructure be built. Culture and refinement, the love of the good and the beautiful is a characteristic of Spartanburg, and these things tower even higher than the commercial achievements of the city.

Wofford College.

Wofford College for young men is the oldest educational institution in the city, being founded in 1854. Four hundred and twenty-five men, drawn from neighboring states are enrolled in its various departments. The college is supported in part and wholly controlled by the Methodist Episcopal Church in this State, and has an endowment of $200,000. During 1916 a campaign was put on by the citizens of this city for the purpose of adding to Wofford's endowment, and by this means expressing the high esteem in which this institution is held. Forty thousand dollars was raised in the whirlwind campaign of three days. The campus is beautiful and spacious, embracing 76 acres. A modern equipment of dormitories, class rooms, science hall, gymnasium, library and athletic field enables Wofford College to offer the young men of South Carolina superior educational advantages. An extremely low estimate of Wofford's equipment is placed at $600,000.



WOFFORD COLLEGE

The City Schools.

The Spartanburg city schools were established in 1884, and they are now entering upon the 32d year of their history. There are 4,708 children and 80 teachers. The schools have enjoyed continued and steady growth. A marked increase in the enrollment in 1916 from that of 1915—nearly 12 per cent. —is due to the compulsory education law, which became operative in September, 1915.

In shaping the policies of the city schools the idea has been to secure the highest degree of efficiency, and that ideal has been carried out.

The board of trustees—six in number—is not chosen by popular election, but at a town meeting of taxpayers. Their term of service is six years. Two are elected every two years, so that at no time will a majority of the board be composed of new members.

The department of school hygiene has been reorganized, and a board of medical examiners has been appointed to do the work required.

The compulsory education law has been in operation in the city of Spartanburg for more than a year. A complete census of all children between the ages of 6 and 21 years has been taken. The children of school age who are mentally and physically sound are in school. Exemptions are granted in extreme cases (fortunately few) to children whose help is absolutely necessary to the support of the family. Employers must keep on file certificates of exemption. These certificates are prerequisite to the employment of children and serve to identify the per-

sons to whom they are issued. If a child thus employed should be discharged, the employer is requested to notify the school superintendents at once. Only four arrests have been made. Some who were opposed to the law at first have reported their neighbors for not sending troublesome children to school. Opposition is practically dead, argument and cavil have ceased, and the public conforms. The right of every boy and girl to an education can no longer be surrounded with prejudice. There is no more danger of a reaction against compulsory education in Spartanburg than there is of a reaction against the multiplication table.

There are five magnificent buildings occupied by the white schools, conveniently located. Plans are being made for the erection of a $150,000 High School in the near future.



CONVERSE COLLEGE



AUDITORIUM CONVERSE COLLEGE
HOME OF MUSIC FESTIVAL

Converse College.

Converse College, one of the leading woman's colleges of the South, might be said to be the child of the cotton mill industry. It was founded in 1890 by D. E. Converse, mill operator and philanthropist. It is non-sectarian, b[u]t strictly Christian. Endowment and plant worth $600,000. Converse is one of the seven woman's college in the South recognized as a standard college where diplomas are accepted anywhere. One hundred and eighty-five students board in the college. There are one hundred and fifty day students. One-half of the student body comes from without the State, every Southern State being represented.

Charming home life is a distinctive feature of Converse College. A resident physician and physical culture teacher encourage all out door sports. An elegant natatorium has recently been added to the equipment.

Converse College is the home of the South Atlantic States Music Festival.



SPARTANBURG Y. M. C. A.

Y. M. C. A.

Spartanburg is justly proud of her Young Men's Christian Association building erected a few years ago. It represents an outlay of $85,000, which was freely subscribed by her citizens in order that every safeguard might be thrown around her young men. Under the present management this is one of the liveliest institutions of Spartanburg. Reading rooms, baths, a magnificent swimming pool, gymnasium, with all modern appliances, lectures, men's Bible classes, and other phases of religious activity, are provided. The business men, as well as young men and boys, patronize this institution freely, and are given the opportunity for healthful exercise in basket ball, volley ball, etc.

County Schools.

As we have stated elsewhere Spartanburg county has a greater population than any other county of either North or South Carolina. It is, therefore, not surprising to know that there are 23,153 children enrolled in the rural schools and 4,703 in the city, making a total of 26,858. During 1915-16 twenty of the one-teacher schools were consolidated and modern graded schools established in lieu thereof. The city of Spartanburg was the first in the State to inaugurate compulsory school attendance, and her lead has been followed within the year by seventeen rural school districts. There are in the county ninety-eight school districts, ninety-one of which have voted special levies. Twenty-one districts are bonded for school buildings, practically all of which are of brick construction. There are fifty-five rural graded schools in the county and eight high schools. Average length of school term in the city is 169 days, in the county 121 days. There are 375 white teachers, 109 negro teachers, making a total of 484. Total value of all school houses and furnishings is $701,595. A tremendous awakening has taken place in this county along educational lines. In addition to a very efficient superintendent of education, provision has been made for



MAGNOLIA STREET

a supervisor of rural schools, as well as a supervisor for the schools of the 26 mill villages. Forty -two rural improvment associations and 30 night schools are now in operation. The enrollment in the night schools is over 800. As an index of the great educational awakening, sixteen new buildings were erected during 1916, at a cost of $54,-200. Two additions to former buildings were made at a cost of $12,500.

Roads.

No country has ever really developed without adequate means of communication. Magnificent school buildings are going up all over the county, fine churches are being built everywhere, and the demand has become insistent for better highways. Here again Spartanburg takes the lead and has provided for a bond issue during the past legislature amounting to one million dollars for road improvement. This is the largest amount ever authorized for road construction in either of the Carolinas. With the improvement of our leading highways the exodus of country boys and girls to the city will be, in a large measure, stopped, and we have reason to anticipate great development in the rural districts, which are, after all, the backbone of our Southern cities.

Textile Institute.

This is a unique institution, as it is a pioneer along educational lines. A few years ago the Rev. D. E. Camack conceived the idea of providing means whereby deserving boys and girls, who are forced to work in cotton mills, could secure an education. By the donations of philanthropic persons throughout the State, but especially in the City of Spartanburg, he was enabled to build a magnificent stone building and equip the institution at a cost of $85,000. The only terms under which entrance can be had in this institution is that the student must work in the mill a sated period and earn the money for the period of study. The enrollment has taxed the capacity of the building and the cry is now for more equipment. Fine men and women are being trained here for a magnificent life wor.k With the door of hope seemingly shut in their faces, many of them

are learning to read and write after becoming of age.

The Music Festival.

Not the least notable of Spartanburg's many claims to distinction lies in its success in inaugurating and continuing its music festival—an annual event known wherever in the South music is highly esteemed.

The Spartanburg music festivals were inaugurated in 1894. Artists who were then celebrated in New York and Philadelphia appeared in conjunction with the local chorous and colonists. At the fourth festival the Boston Festival orchestra was engaged: at the fifth "artists' night" was made an added feature.

The festivals have gone uninterruptedly for 22 successive years, with ever-increasing artistic distinction. Great orchestras have played many programmes of immortal music, and many of the most famous artists of the world have sung their way to the hearts of huge audiences.

The 23rd Spartanburg music festival will be held on May 16, 17 and 18, next.

Walter Damrosch will again bring his justly celebrated orchestra and a quartette of superior vocalists. Other vocalists chosen from the most famous now before the public will assist, with the Converse College Choral society, in making the occasion a memorable one.

The children's chorus, under new leadership, may be expected to renew the splendid impression they made at their first two appearances.

The Converse College auditorium, the home of the Music Festival, is perhaps the most commodious in the State, with a seating capacity of 2500. The adult chorus numbers 200, many of whom are charter members of the Choral society. The children's chorus of 400, the popular hit for two years, is the pride of the city, and subjcet of most favorable comment by musical



CITY HALL

critics. The children's chorus is ranked among the best in the United States.

Chamber of Commerce.

The Spartanburg Chamber of Commerce is a progressive organization composed of practically all the business elements of the city. The officers of the chamber are Ben Hill Brown, president, Paul V. Moore, manager; Isaac Andrews, R. H. Blackburn, B. T. Earle, E. H. Everett, C. O. Hearon, H. H. Herring, F. H. Knox, H. F. McGee and F. C. Rogers, directors.

The Spartanburg Chamber of Commerce has taken a leading part in all measures that have for their aim the commercial and manufacturing advancement of the city. Realizing the importance to the city of the fullest development of the great agricultural possibilities of the territory tributary to Spartanburg, the Chamber of Commerce maintains a demonstration department with a capable man in charge. Diversification and soil building are receiving the special attention of this department.

A department of Home Economics is devoted to the betterment of home and living condition in the rural sections,



THE CITY OF SUCCESS

and to club work among the wives and daughters of the farmers.

Terminals.

All steam roads entering Spartanburg use the Union station. This is the most up-to-date and commodious station between Washington and Atlanta. Trains are reached through a sub-way and underground waiting room. Improvements to passenger station, amounting to $152,000, have been made within a year, and $852,000 will have been spent by the Southern for terminals, etc., in this city.

Briefllets.

The city is under Commission form of government.

Waterworks municipally owned.

Daily capacity two million gallons.

Chlorinating plant removes all possibility of typhoid contamination.

New city hall costing $40,000.

Modern steel office building, nine stories.

A city of handsome churches and beautiful homes.

Over 100 miles of side walks.

The home of the largest county fair in South Carolina.

Four white hospitals and one colored.

Home of U. S. Government Pellagra Hospital.

Efficient health department.

Abattoir with daily meat inspection.

Come to Spartanburg and be healthy, wealthy and wise.

Spartanburg Chamber of Commerce,
Paul V. Moore, Mgr.

SPARTANBURG'S HEALTH DEPARTMENT.

In any enlightened and progressive city government one of its chief departments must be one dealing with the public health. The city officials of Spartanburg long since realized that fact and from a small beginning made several years ago, with a Sanitary Inspector operating under the direction of the Board of Health, the department has grown to a point where it now employs as Director of Health the full time of a physician trained in public

health administration, who is assisted by a full time Sanitary Inspector and a part time Plumbing Inspector. The Board of Health, consisting of nine members appointed by the City Commissioners, is made up from representative physicians and other citizens who serve without compensation.

It has been the policy of the present Director of Health to make his department an educational rather than a policing institution and with this end in view he has sought and obtained the active co-operation of the local press through which means much information concerning public health matters has been disseminated.

Daily meat inspection is maintained at a central abattoir and all markets and restaurants are inspected Dairies are inspected and scored according to recognized standards. All new plumbing is inspected and made to conform to modern practice. The extension of the city's sewer system has been constantly agitated with the result that a referendum for the issuance of $40,000.00 of sewer bonds is now before the people. Regular collection of garbage and night soil is maintained, the former of which is burned in pen incinerator and the latter discharged into the public sewer. The co-operation of the physicians of the city has been earnestly solicited and generally extended in the matter of prompt and complete returns of vital and morbidity statistics to the end that a proper understanding of the health conditions and death rate of the city might be obtained and quarantine against communicable diseases secured. A well equipped laboratory has been installed in the city hall where such tests as concern the departments work can be made.

In general terms the sanitation and health conditions of Spartanburg may be safely said to be above those of the average southern city and it is a matter of some pride to the present administration that the crude death rate of 16 per thousand populaion for 1915, which was much below that of the vast majority of southern cities, was reduced to 15 per thousand population for 1916, which means a saving of 21 lives to the city and is argument enough for both the need and practicability of public health work.

GOOD SAMARITAN HOSPITAL.

The Good Samaritan Hospital, a nonsectarian Christian institution, was organized November 1, 1907, to meet a crying need among the suffering poor. It is strictly an institution of the people, held in trust and operated by a self-perpetuating Board of Trustees for the people. No doctor is allowed on the Board. The Medical Director is only ex-officio member. The hospital is chartered under the laws of the State as an eleemosenary institution. No taxes or dividends will ever be paid. All moneys received go directly into the improvement of the property or the charity fund. The capacity is 25 beds and a training school with 12 nurses is maintained.

Officers: W. M. Whiteside, President; Dr. A. D. Cudd, Medical Director; Miss Nannie McClintock, Superintendent.

THE STEEDLY HOSPITAL.

In the Steedly Hospital, Spartanburg has one of the best constructed, most modern Hospitals in the State. This recently completed fireproof building and equipment represents an investment of little more than $100,000.00.

The building has four floors, basement and sub-basement. In the sub-basement is located the heating plant, and the high pressure steam plant. In the basement are the X-Ray Department, the kitchen and diet kitchen.

The first floor is used exclusively for



STEEDLY HOSPITAL

Doctors' and executive offices, with a large and commodious lobby, waiting rooms and one room devoted to medical library.

The operating room is on the fourth floor, and is unsurpassed in finish and appointment and is finished in tile, marble and white enamel.

The patients' rooms occupy the second, third and fourth floors, each room having telephone connection, hot and cold water, and private bath attached.

The wards are on the second, third and fourth floors at the back.

The staff of the Hospital is composed of Dr. B. B. Steedly, Surgeon, Dr. W. S. Zimmerman, Associate Surgean, Dr. J. H Hunter, Anesthetist, Dr. R. H. Fike, Roentgenologist, Mrs. F. M. Montgomery, Superintendent, and Miss L. G. Brown, Supervisor of Nurses.

THE UNITED STATES PELLAGRA HOSPITAL.

The following is taken from the Annual Reports of the Surgeon-General of the U. S. Public Health Service for the fiscal years 1915-1916, relative to Special Studies of Pellagra at Spartanburg, S. C.:

"The work carried on at the station may be roughly classified into three general divisions: Administrative, clinical, and laboratory. The laboratory work has been under the direction of Dr. Carl Voegtlin, professor of pharmacology, Hygienic Laboratory, while the administrative and clinical work has been under the direction of the medical officer in charge, which position was held by Past Asst. Surg. R. A. Herring until January 20, 1915, when he was relieved by Past Asst. Surg. R. M. Grimm.

A considerable amount of work was necessary in making the alterations and repairs to the buildings leased by the

service in order to adapt them to the purposes of the work. One building has been equipped and furnished for use as a hospital and laboratory, and another for use as a hospital annex. Three rooms in the hospital building have been converted into a chemical laboratory and a large amount of chemicals and apparatus obtained by way of equipment. The hospital was opened on August 17, 1914, with a capacity of 22 beds. On June 10, 1915, by the opening of the annex, this capacity was increased to 34, and can be raised to 40 if necessary. During the months of May and June the hospital has been filled to its capacity and many applicants turned away on account of lack of accommodations. The patients have been selected from among a waiting list of applicants as vacancies occurred. A growing correspondence has been carried on incident to the numerous applications and inquiries in order to select suitable cases for study and treatment.

The treatment of the patients has been largely dietary. Three regular diets have been in use and a number of special ones prescribed from time to time in cases requiring them. By the use of diet-record forms accurate records of the kinds, amounts, and methods of preparation of the food consumed by the patients have been kept. The foods have been weighed before and after cooking and before and after serving, so from these data the exact amount of uncooked food consumed by a patient may be calculated for each meal, and consequently the total amount of food consumed by the patient during the entire stay in the hospital is known. These weighings have been made by the head nurse and dietition. The data thus obtained in connection with the clinical course of the cases may furnish important information regarding the relationship existing between diet and pellagra. Clinical histories and clinical notes have been taken as completely and thoroughly as practicable. A fairly well-equipped clinical and bacteriological laboratory has been recently established, which will afford opportunity for an increased amount of clinical laboratory work in connection with the study of the cases.

In addition to the treatment of patients in the hospital, an out-patient department has been conducted which has kept the hospital in touch with the local pellagra situation. These out-patients have been served daily (at noon one well-balanced meal, which with a placebo has been the only form of treatment."

During the period from August 17, 1914, to June 30, 1915, 110 patients were admitted to the hospital. During the period July 1, 1915, to June 30, 1916, 120 patients were admitted, 9 o which were re-admissions.

While no definite conclusions have yet been drawn from the clinical work, it has been found, as a rule, that those patients who have continued treatment over a reasonable length of time have shown remarkable improvement. Relief from care, worry, and responsibility while in the hospital has undoubtedly been a factor in favor of the hospital patients. Analysis and comparison of the clinical and dietary data which are being collected at the station will probably be of great value in showing a definite relationship between certain articles of diet and the treatment of pellagra with miximum success.



SPARTANBURG HOSPITAL

SPARTANBURG HOSPITAL.

The Spartanburg Hospital was established in 1905 by Drs. Hugh R. Black, James L. Jefferies, and George W. Heintish, a private residence with the capacity for eleven beds having been purchased and fitted up for the purpose. To this building several rooms have been added, with an increase of seven beds, making in all eighteen beds.

The demands on the institution grew so rapidly, however, that the owners decided to increase the capital stock with a view to erect a more up-to-date hospital building. On July 6th, 1907, these plans were perfected. Several other physicians, together with a number of our prominent citizens, became interested, and as a result a very handsome and modern structure with a capacity of forty beds has been built and is now in operation. The new building is three stories in height, constructed of compressed brick, with hardwood floors, steam heat, gas and electric lights, and is modern in all its appointments. The operating room, situated on the third floor, lacks nothing in thoroughness of equipment—a modern X-Rqay Department and Laboratory have been added. In the two buildings there are fifty-eight beds. An efficient Training School, with fourteen nurses in connection with the hospital is maintained.

The officers are: Dr. H. R. Black, President; Dr. J. L. Jefferies, Vice-President and Treasurer; Professor A. Mason Du Pre, Dean; Miss Marie Zellfelder, Superintendent.

SPARTANBURG GENERAL HOSPITAL.

Spartanburg is soon to have a large General Hospital to cost not less than $150,000.00. The last Legislature passed a bill providing for a special tax levy for this purpose and plans are now on foot for effecting its establishment, the realization of which will make Spartanburg the medical center of the Piedmont Section.

THE SPARTAN MEDICAL CLUB.

Organized in 1915 for the promotion of Medical and Surgical advancement, now occupies handsomely furnished rooms in the Chapman Building. Regular meetings are held each Wednesday night. All the leading American and several foreign Medical Journals are taken. New books are being constantly added to the Library, which is open all the time and the Club Members are glad to welcome visitors at any time.

ORIGINAL ARTICLES

VENEREAL PROPHYLAXIS.

Marion H. Wyman, M. D., Columbia, S. C.
Chairman of Venereal Committee, of the S. C. Medical Assn., 1916-17.

Mr. President and Members of the House of Delegates:

A BROTHER practitioner, whom I judge is well-informed, for he has been coming to the House of Delegates a number of years, recently asked, in substance, the following question: "What is the Venereal Committee going to worry us with this year? Do they not realize that there has always been a Committee in our State Association for the prevention of venereal diseases and that this Committee has faithfully introduced, from year to year, suggestions which, after receiving full discussion—were either approved or killed, but that no action or even serious consideration has ever been aroused in our profession on these matters? If this physician is correct in his assertion, it certainly behooves us, as a body of medical men, to pause, consider and, if possible, here and now take some action on this most painfully interesting subject, thus helping to protect our citizenship from the far-reaching consequences of contracting and spreading these diseases which increase poverty, vagrancy, degeneracy, crime and lunacy to such a large extent in our State.

Boards of Health recognize three general rules for the prevention of germ diseases; using malarial fever as an example:

First—Preventing breeding places.

Second—Protection against the intermediary host.

Third—Thoroughly curing every infected person.

These three principals may also, if effectually applied, be used in the prevention of venereal diseases.

Rule 1.—Relating to the prevention or control of the breeding places—must include, of course, the clandestine and open-house prostitute. (That these unfortunate women exist in our midst will be admitted by all). They represent nothing more than breeding places, incubators, reservoirs, or better

The above report has not been published hitherto as the Committee wished to present the subject directly to the Constituent Societies.—(Ed.)

still, transfer stations for filthy germs that cause the diseases under discussion.

After thoroughly investigating these matters, it appears to be decidedly unwise to recognize and legislate houses of "ill-fame" (personally we feel they should be abolished), but much can be done by controlling these resorts if they must exist in our State. The United States White Slave officer, of Columbia, says that the local traffic has decreased over thirty per cent. since alcohol and pianos no longer add to the attractiveness of these places. From this observation it would appear that the prevention of frivolity and "red-light" social intercourse is an important step towards decreasing immorality. The other woman, representing the clandestine type of disease spreader—the one to be most feared—can only be controlled, to a limited degree, by passing a State law which corresponds to the Mann White Slave Inter-State Law, making it unlawful to transport women within the State for immoral purposes.

The second and third rules: "Protecting against and curing every infected person," are the ones of most vital interest and opens to us, as physicians, our best opportunity for real prophylaxis. After all the many remedies are tabulated, they may be condensed into the one word "enlightenment." Too long has reticence been our policy, it is false in principle and injurious in tendency. If all men could be properly **informed** of the dangers of **venereal diseases,** fewer would contract them, would neglect them and spread them as they now do.

Protection against the intermediary host—meaning those already infected —can only be accomplished by informing the younger generation, not only the proper function of their sexual organs, but also the dangers of these diseases. The public is fast becoming wise to this necessity and are probably being improperly enlightened along these lines by those outside our profession. However, some good work is being accomplished at present by such organizations as the Y. M. C. A., Boy Scouts, Sunday School teachers, Chautauqua lecturers and others, but really the proper and truly scientific way to present this subject is through the well-informed physician. Therefore, it is not only our privilege, but a most apparent duty, that we, as guardians of the health of our State, being best prepared to instruct, are compelled by every law of duty and justice to desist from sitting calmly by and have the flower of our State, both male and female, sacrificed on the altar of our neglect. Education will soon introduce a custom, which should later become a law, whereby a prospective bride and groom will furnish a "clean bill of health" when they meet at the sacred altar of matrimony. For these reasons, if for no other, this Committee most strenuously contends that correctly conducted education in sexology by the physician is imminently proper and can result only in benefit; while neglect or indifference here will surely result disastrously to the young men and women of to-morrow. The services of the profession would tend to present these matters in their true light with the idea to emphasize sufficiently to draw attention, but not to arouse sexual inclination; to exhibit the evil in its true aspect, but not in a fascinating manner. Why have we, as organized medical men, neglected this important matter so long? Is it possible that we have not taken time to give enough thoughtful consideration to these moral questions? Surely it is not a lack of information on our part that makes us indifferent to these vital matters? Whatever our

excuse, it cannot possibly reflect any credit upon us in whose hands rest the health and happiness of those for whom we are responsible.

The last rule: **thoroughly curing every infected person** should strike deep into the heart and conscience of every physician who attempts to handle these cases. **Gonorrhoea** and **Syphilis are** and **must be** emphasized as being **serious infections,** which require a great deal more time to cure than just checking their outward manifestations. This must be impressed on those thus diseased and also that a permanent cure cannot be assured until the laboratory and other scientific methods have proven negative. The family physician must be prepared to give a scientifically proven "clean bill of health," not proven by conversation but by a thorough examination. Wives innocently infected by those most dear to them, their husbands, are daily, in great numbers, becoming invalids, undergoing serious operations which unsex them and even dying—all because the husband thought himself well of the slight attack of socaled "clapp" which the public and, more deplorable still, even some doctors consider no worse than a bad cold. Such ignorance or indifference on the part of doctors and patients inevitably brings untold suffering to the unfortunate off-spring of those thus diseased; the blind, the feeble-minded, the crippled and otherwise maimed are all horrible living expressions of someone's blunder! And, alas! in a majority of case the doctor is directly or indirectly to blame!

It gives the Venereal Committee much pleasure and satisfaction to bring to your attention the fact that much has been done within the last year that tends to limit the spread of venereal diseases. The first and greatest is the decreased use of alcohol on account of prohibition. Also, in Columbia, at least, music and other frivolities have been suppressed in the houses of "ill-fame."

Sexual education has been carried on by the Y. M. C. A. speakers, Sunday School teachers, Chautauqua lecturers, Boy Scout and other organizations, but, so far as is known, we, as an organized profession, have done nothing. However, with satisfaction, we draw your attention to the fact that there is no excuse for these cases being improperly diagnosed and not thoroughly treated, for our State Board of Health's laboratory, of which we certainly have cause to be proud, is now prepared to do, free of charge, not noly Wasserman's to diagnose syphilis and tell when cured, but they also examine urethral smears, massaged secretion from prostate, etc., thus helping the busy practitioner to determine the true condition of his patient. It is noted with gratification that our State Medical Association has recorded its recognition of the intimate connection between diseases, including venereal diseases, poverty, degeneracy and crime by inviting Mr. A. S. Johnstone, Secretary of the State Board of Charities and Corrections to present a paper on this subject at this meeting.

Your Committee on the Prevention of Venereal Diseases offers the following resolutions for your consideration and, if possible, a favorable action:

First. We favor a law, similar to the Mann White Slave Inter-state Law, which prohibits the transportation of women within our State for immoral purposes.

Second. We favor not recognizing or granting licenses to immoral houses but rather to suppress them, as the United States White Slave officer of Columbia thinks can be done by decreasing their attractiveness, in pro-

hibiting music, dancing, drinking and other frivolities.

Third. We believe in a custom, later a law, to furnish a "clean bill of health" with every license to marry.

Fourth. We favor establishing in connection with the vital statistics bureau a system of voluntary reporting by number of all cases of gonorrhoea and syphilis

Fifth. We further wish the House of Delegates to express themselves as being in accord with the introduction of the free Wasserman's as a part of the routine work of our State Laboratory, for this is certainly a decided step towards prevention of the spread of syphilis, and we urge the profession throughout the State to avail themselves of the benefits to be derived from its frequent use.

Sixth. We do not favor an indiscriminate campaign in sexology but think the proper way to instruct the public in these delicate matters is by personal talks from the physicians.

The above as they stand were accepted and approved by the South Carolina Medical Association which met in Charleston, April, 1916.

Adopted at the South Carolina Medical Association at Greenwood. 1915.

It is the duty of the family physician to instruct parents how to impress the nature and functions of the sex organs upon their children, and not only to stress the probable injury to develop from abuse of these sex functions, but to emphasize the dangers of venereal diseases. The doctors must also educate by moral talks those already infected, and must impress the seriousness of the infection and the importance of a complete laboratory-proven cure; this will materially help to decrease the innocent unintentional spreading of these dread diseases.

In closing, we hope the following will interest many:

Surgeon General Holcomb of the United States Navy, writing in the January issue of "The Military Surgeon," disputes the success of present methods of venereal prophylaxis in the navy. In closing his article he makes the following noteworthy statement: "The solution of the problem of venereal diseases is not to be sought in a campaign for the venereal prophylaxis nor in the establishment of segregated districts. The foundation of the entire venereal problem is deeply entrenched in the very moral being of mankind. Until moral development assumes a higher and more spiritual plane, the sex problems will continue to undermine the physical, mental and moral forces of the community and the grist of physical and mental invalids will continue to fill our hospitals, asylums and penal institutions."

SOCIETY REPORTS

LAURENS.

The Laurens County Medical Association held its regular monthly meeting the fourth Monday afternoon in Laurens, in the office of Dr. R. E. Hughes.

The following officers were elected to serve for 1917:

President: Dr. J. L. Fennel, Waterloo, S. C.

Vice-President: Dr. S. C. Hayes, Clinton, S. C

Secretary-Treasurer: Dr. J. M. Bearden, Laurens, S. C.

Delegates: Dr. R. R. Walker, Laurens, S. C., and Dr. S. C. Hayes, Clinton.

"Gun Shot Wounds of the Abdomen," and "Pneumonia," will be discussed at the February meeting.

Our Society is doing good work and we hope for a splendid year during 1917.

J. M. Bearden,
Secretary.

MARLBORO.

Tribute to Dr. Townsend.

Dr. Arthur S. Townsend of Bennettsville, S. C., a graduate of the Medical College of the State of South Carolina, Charleston, 1887, and a member of the South Carolina Medical Association, the Marlboro County Medical Society and the Tri-State Medical Association of the Carolinas and Virginia, died at his home on November 12, 1916, aged 53 years.

Whereas: We, the members of the Marlboro County Medical Society, desire to place on record our testimony of love and appreciation in which Dr. Townsend was held by us, and

Whereas: We also wish to testify to his standing and worth in our community; therefore, be it resolved:

First: That in his death we have lost one of our most zealous and devoted members and our town and community one of its truest and most loyal citizens.

Second: That Dr. Townsend exemplified in his daily life all those principles that represent the best in our profession; always looking to the best interest and welfare of his patients; never considering himself or his own comfort when he could do anything to relieve the sick and suffering. As a citizen he was always active and alert to everything looking to the advancement of his town and community; never shirking or evading any obligation or duty devolving upon him; never putting off for tomorrow that which could be done today; always putting forth his best efforts in anything he would undertake.

Third: That a page in our minute book be inscribed to his memory; that a copy of these resolutions, suitably engraved, be sent to the family; that they be published in the Pee Dee Advocate, the Journal of the South Carolina Medical Association and the Journal of the Tri-State Medical Association.

Signed:
J. F. Kenney,
Chas. R. May,
D. D. Strauss,
Committee.

PERSONAL AND NEWS ITEMS

The increasing use of laboratory tests in modern medicine, as well as constantly growing patronage, has made necessary a considerable addition to the laboratory facilities of the Battle Creek Sanitarium. In the urinary, fecal, chemical, bacteriological and pathological departments, about thirty persons are employed, a number of them being physicians and college graduates. In addition to the analyses, examinations, etc., in connection with the regular work of the institution, a certain amount of original research work is always carried on. At present, investigations are under way to find what carbohydrates will pass farthest through the intestine be-

fore undergoing complete digestion. Four cases of fistula near the ileocecal valve have made possible this study. Specimens taken from the fistula are examined and are also compared with those which have passed through the colon. The value of the study lies in the fact that undigested carbohydrates in the intestines lessen or prevent putrefaction. Those which are not absorbed in the earlier stages of the progress toward the colon are therefore of especial value.

The second examination to be given by the National Board of Medical Examiners will be held in Washington, D. C., June 13, 1917. The examination will last about one week.

The following states will recognize the certificates of the National Board: Colorado, Delaware, Idaho, Iowa, Kentucky, Maryland, North Carolina, New Hampshire, North Dakota and Pennsylvania. Favorable legislation is now pending in twelve of the remaining states.

A successful applicant may enter the Reserve Corps of either the Army or Navy without further professional examination, if their examination papers are satisfactory to a Board of Examiners of these Services.

The certificate of the National Board will be accepted as qualification for admittance into the Graduate School of the University of Minnessota, including the Mayo Foundation.

Application blanks and further information may be obtained from the Secretary, Dr. J. S. Rodman, 2106 Walnut Street, Philadelphia.

At the Medical College of the State of South Carolina, special lectures to the members of the senior class are being given by physicians throughout the State who are specialists in their particular lines of medical endeavor. Already this session, Drs. C. B. Earle, of Greenville, E. A. Hines, of Seneca, and James A. Hayne, of Columbia, have lectured. Drs. F. H. McLeod, of Florence, G. A. Neuffer, of Abbeville, William Weston, of Columbia, S. C. Baker, of Sumter, H. H. Wyman, of Aiken, and J. J. Watson, of Columbia, are in the list of those who are to deliver lectures.

Quite a feather in the cap of the Medical College is the recent ruling by which graduates of class A medical colleges who make an average of 85 or over for the four years of their course may enter the Medical Corps of the United States Navy after standing a nominal examination. It is thought that many of the men of the present senior class will take advantage of the opportunity to enter this attractive service.

Dr. F. B. Johnson, associae professor of pathology and bacteriology, has returned after a tour of duty with the National Guard on the Mexican border.

BOOK REVIEW

AN INQUIRY INTO THE PRINCIPLES OF TREATMENT OF BROKEN LIMBS.—A Philosophico-Surgical Essay with Surgical notes by William F. Fluhrer, M. D., Consulting Surgeon to Bellevue and Mount Sinai Hospitals.

With the discovery of X-Rays and the extensive utilization of operative procedures the principles of treatment of broken limbs appear in a new light. The author has endeavored, in a creditable manner, to elucidate the broad general principles of the whole subject, based largely upon his experience at Bellevue and other hospitals. The book has been well printed on good paper and the illustrations are excellent. The work is interesting as it differs from dry text book parlance.

HAND BOOK OF SUGGESTIVE THERAPEUTICS, APPLIED HYPNOTISM, PSYCHIC SCIENCE—A Manual of practical Psychotherapy, Designed especially for the Practitioner of Medicine, Surgery, and Dentistry. By Henry S. Muro, M. D., Omaha, Nebraska. Fourth Edition, Revised and Enlarged. St. Louis, C. V. Mosby Co., 1917.

We believe it to be practically impossible to become a successful practitioner of medicine and surgery without making use of Suggestive Therapeutics in a large degree. This book has reached its fourth edition and presents the subjects not only from an instructive standpoint but is also very interesting.

THE NEWER METHODS OF BLOOD AND URINE CHEMISTRY.—By R. B. H. Gradwohl, M. D., Director of the Pasteur Institute in St. Louis and the Gradwohl Biological Laboratories, St. Louis, and A. J. Blaivas, Assistant in the same; sometime technician in Pathological Chemical Laboratories, New York Post Graduate Medcial School and Hospital; and former assistant, Chemical Laboratory, St. Luke's Hospital, New York City. With Sixty-five Illustrations and Four Colored Plates. St. Louis, G. V. Mosby Company, 1917.

The preface of this book embodies a clear idea of its purpose and we therefore give it in full: The present work was undertaken in response to a demand from our many professional friends who have become keenly interested in this line of laboratory investigation. We lay but little claim to originality, but feel that if we have collected the major part of the information that is so widely scattered throughout the Journal literature of the past three or four years and boiled it down into a readily digested form, our labors will not have been in vain. The investigations in blood chemistry are proceeding rapidly so that, of necessity, this sort of book will be difficult to keep up-to-date. We therefore, ask for the indulgence of those who are insistent upon the very last word.

It will be noted that in the main, we have given but one method for each test. We have done this, because we believe we know that the majority of the practical workers along this line judge the best test to be: besides, we see no reason for describing tests that time and experience have proved fallacious or too complicated. The work in hand gives the technic just as we carry out our routine and research work in our laboratories.

BETTER BABIES.—A Guide to the Practical Care of the Mother and Young Child. By Samuel A. Visanska, Ph. G., M. D. Formerly Professor of Theory and Practice of Pharmacy, Southern College of Pharmacy; Founder Children's Clinic, Wesley House; Physician to Home for Incurables; Former Chairman Milk Committee, Atlanta Chamber of Commerce. Atlanta, Georgia, Foote & Davies Company, 1917.

Dr. Visanska has written one of the few books on this subject from this section of the country. It is a volume of 254 pages and intensely practical. The subject matter of the book was presented before the South Carolina Medical Association in an address in Greenwood some two years ago. We commend the work to both the laity and the profession. The author has brought together much information one would find only after laborious search through many larger volumes.

THE DIAGNOSIS AND TREATMENT OF ABNORMALITIES OF MYOCARDIAL FUNCTION.—With special reference to the use of Graphic Methods. By T. Stuart Hart. A. M., M. D.. Assistant Professor of Clinical Medicine in the College of Physicians and Surgeons, Columbia University. Visiting Physicians to the Presbyterian Hospital in the City of New York. Illustrated with 248 Engravings, 240 of which are original.

The last decade has disclosed more intensive work on diseases of the heart perhaps than has been done in half a century. The book under review has been carefully compiled and represents the essence of our knowledge in this regard. Under the head of treatment of heart disease the author gives most excellent advice. The Bibliography has been carefully selected.

THE SURGICAL CLINICS OF CHICAGO.—Volume I., Number 1 (February, 1917). Octavo of 221 pages, 83 illustrations. Philadelphia and London: W. B. Saunders Company. 1917. Published Bi-Monthly. Price per year: Paper, $10.00; Cloth, $14.00. W. B. Saunders Company, Philadelphia, London.

The Surgical world has looked forward with keen interest to the appearance of the Surgical Clinics of Chicago. The idea appears to be to enlarge upon the original Murphy's Clinics by stenographic reports from a large number of Clinics in Chicago. To merely mention the names of such masters as Andrews, Beck, Bevan, Ochsner, and McArthur means highly instructive material. In this issue Bevan presents Gall Stone Disease historically as well as Clinically in a most interesting manner. Also the general principles of the operative cure of Hernia. Ochsner especially emphasizes the operative methods in the treatment of goiter, giving excellant illustrations. We do not doubt these clinics which will appear every two months will continue to fill a large place in the scientific world.

PRACTICAL URINALYSIS.—By B. G. R. Williams, M. D., Director Wabash Valley Research Laboratory. Author of "Laboratory Methods," etc. Illustrated.

We heartily commend this little book for both the general practitioner and the Laboratory worker. The instructions are very clear, concise, and readily followed.

CLINIC AND LABORATORY TECHNIC.—By H. L. McNeil, A. B., M. D., Adjunct Professor of Medicine and Instructor in Physical Diagnosis University of Texas Medical School, Galveston, Texas. Illustrated.

This is a small volume of 88 pages but appears to be eminently practical, embodying many points not often mentioned in the larger works.

THE PRACTICAL MEDICINE SERIES.—Comprising ten volumes on the year's progress in Medicine and Surgery. Under the general editorial charge of Charles L. Nix, A. M., M. D. Professor of Physical Diagnosis in the Northwestern University Medical School. Volume IX. Skin and Venereal Diseases. Edited by Oliver S. Ormsby, M. D., Professor and head of the Department of Skin and Venereal Diseases, Rush Medical College, and James Herbert Mitchell, M. D., Hyde Memorial Fund Fellow, Assistant in Cutaneous Pathology, Rush Medical College. Series 1916.

We note an interesting discussion in this volume of the relation of diet to the diseases of the skin and as usual eczema has a full share in this investigation. No definite conclusions have as yet been reached. A large section of the book is devoted to syphilis, such as syphilis and Life Insurance, Syphilis and Internal Medicine, Syphilis in the various armies of Europe.

THE PRACTICAL MEDICINE SERIES.—Comprising ten volumes in the year's progress in Medicine and Surgery. Under the general Editorial Charge of Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume X. Nervous and Mental Diseases. Edited by Hugh T. Patrick, M. D., Professor of Neurology in the Chicago Polyclinic; Clinical Professor of Nervous Diseases in the Northwestern University Medical School; Ex-President Chicago Neurological Society. Peter Basoe, M. D., Assistant Professor of Nervous and Mental Diseases, Rush Medical College. With the collaboration of Lewis J. Pollock, M. D. Series 1916.

This volume contains a most excellent resume of the year's progress in diseases of the nervous system. The latest investigations of the spinal fluid and diseases of the spinal cord are notable examples.

CATALOGUE OF HOSPITAL EQUIPMENT.—Including High Pressure Sterilizers, Steel Hospital Furniture, Therapeutic Bath Equipment. Frank S. Betz Company, Chicago Sales Department, 30 E. Randolph St. Main Office and Factory, Hammond, Ind. 1917.

Owing to the large increase in the number of hospitals being built in our State and elsewhere and an up-to-date hospital catalogue is absolutely necessary. The Betz Company has presented a splendid edition, worthy of careful consideration by all intending purchasers of hospital goods.



Dr. Tyler's Private Hospital
For Surgical Patients

TELEPHONE 738 711 *E. NORTH ST.*

GREENVILLE, S. C.

Broadoaks Sanatorium

MORGANTON, N. C.

A private Hospital for the treatment of Nervous and Mental Diseases, Inebriety and Drug Habits. A home for selected Chronic Cases

ISAAC M. TAYLOR, M. D., Supt. and Resident Physician.

If you think of taking a

Post Graduate Course

in New York doctor, The Journal has something interesting to offer.

The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, $2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.
J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.
WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital, Boston, Mass.

OBSTETRICS AND GYNECOLOGY.
ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY
M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.
G. T. TYLER, M. D., Greenville, S. C.
R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.
J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.
E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

MEETING ASSOCIATION OF SANITARIANS GREENVILLE

The Southeastern Sanitary Association and the Association of South Caroina Health Officers will meet in Greenville, May 9 and 10. The programs promise much, and we urge every member of our State Association who possibly can attend—but especially all who are directly interested in Public Health work.

RESPOND PROMPTLY TO OUR COUNTRY'S CALL.

Probably by this time every medical man in the State is aware of the fact that his country needs his assistance. We urge our readers not to deliberate too long over the path of duty. Nothing short of major difficulties should be weighed in the balance. All minor considerations should be banished from the mind, for a quick response means an early step towards invincible efficiency. The South Carolina Medical Association at Spartanburg went on record to the effect that the interests of those who entered the service would be protected so far, as organized medicine could do so. A plan was adopted whereby one third of the fees of those who gave up their practices should be turned over to them or their families.

MEDICAL COLLEGE WANTS NAMES OF ALUMNI

The Medical College of the State of South Carolina requests Alumni to send in their names and addresses in order that the college may be in position to communicate with them in reference to plans for preparedness.

SPARTANBURG MEETING A SUCCESS.

We believe we are not overstating the truth when we say that the Spartanburg meeting was from every standpoint a marked success. The officers of the Association and the Spartanburg committees had given much time and thought to the preparations. The attendance surpassed any meeting hitherto held. viz., 273 actually registered. The report of the Secretary showed a membership of 740 which also surpassed previous records. It is not much to expect that fifty per cent of the membership will in future attend the meetings. The election of Dr. F. H. McCleod, of Florence by unanimous vote was a signal honor rarely thus bestowed. Aiken was selected as the next place of meeting and it is confidently predicted that nothing will be lacking in the efforts to improve upon the high standard set by Spartanburg.

ORIGINAL ARTICLES

HOW TO INCREASE THE INDIVIDUAL AND COLLECTIVE EFFICIENCY OF THE MEDICAL PROFESSION OF SOUTH CAROLINA.

By C. B. Earle, M. D., Greenville, S. C.

I WISH to express to you my deep and heartfelt appreciation of the honor that you have bestowed upon me last year in electing me as your President. I have attempted for the past twelve months to carry out the wishes of this Association, and to do what I could to increase its influence in our State. I am aware that I have made many errors, and have left undone many things that should have been done; but these were owing to my incapacity and not to my unwillingness to do what I could for this Association.

During the past year I have personally visited several of the District Medical Associations, and many of the County Societies; and have had an opportunity of seeing the cordial indorsement that the State Medical Association is receiving at the hands of the individual members of the Profession throughout the State. These organizations are accomplishing much good for the Profession of this State, and through them the public at large is being greatly benefitted.

In 1910 the distinguished President of this Association; the late lamented Dr. John L. Dawson, spoke to you upon the topic of Pre-Medical Training of Students. Last year my distinguished predecessor, Dr. Neuffer, spoke of Preparedness of the Medical Profession.

I wish to consider with you briefly, what seems to me to be the most important problem for the consideration of this Body, and that is—HOW TO INCREASE THE INDIVIDUAL and COLLECTIVE EFFICIENCY of the MEDICAL PROFESSION of SOUTH CAROLINA.

Our students, as a rule, are well founded in the elementary studies before reaching a Medical College. Our Medical College is giving a training to a medical student that is far be-

Presidential address delivered before the South Carolina Medical Association, Spartanburg, S. C., April 18, 1917.

yond what the student of a few years ago received. But, little is done to keep up the interest, activity, and the studiousness of the Medical Practitioner, once he gets a diploma and a State License. Many put aside their books, gradually drift away from other members of the Profession, allow their subscription to the Medical Journals to lapse, and after a few years, have lost their interest in the Theory of Medicine, and are only interested in the practice of Medicine because of the financial remuneration that comes from that source; thereby reducing the Medical Profession to the status, in their individual cases, of being a trade. This is an injustice to the patients, to their community and to themselves. They have thrown away a large part of their early training; they have not attained the rewards that their early efforts should have warrented.

We have in South Carolina, at present 1289 Licensed Practitioners. The members of this Association comprise about 750. In 1910 64-9-10 per cent of our Physicians were under the age of 46. It seems to me that it is possible to prevent, to some extent, this waste of medical talent, and prevent sickness and suffering, which incompetent medical service gives rise to—to a large extent, in our State.

We have seen how poorly organized our Country is for war. How much effort has been expended to get information as to Medical resources. And, some day, we hope soon, Europe will become sane, and as a result of highly efficient organizations and well trained men, competition will be tremendously increased. We will have to adjust our affairs to meet new conditions.

Some of our richest farming lands are poorly utilized because of malaria. Hook Worm has cost millions—Typhoid continues to take its toll of lives and wealth each year, while Tuberculosis seems always with us. Of course, the problems, connected with these diseases, are more social than medical, but the State, or County, can do little without medical assistance and could South Carolina secure the continued cooperation of a highly efficient Medical Profession, tremendous advances could be made, and millions added to the State wealth. We have a splendid State Board of Health that has done a tremendous amount of valuable work; but their results for good will be trebled, or quadrupled, could it secure the assistance the Profession might give.

We cannot attain the ideal of having a competent Physician or Surgeon for every possible patient who may become sick, no matter where located; because large parts of our State are thinly settled; having tracts of marsh-lands, swamps, or mountains so that they can only support a small population. We have the smallest number of Physicians in proportion to population of any State in the Union; there being one Physician to 1141. The Census of 1910 is my authority for this statement.

In considering this matter it has seemed to me that the County Medical Society should be the best means of getting at the individual Physician, of stimulating his interest, and making him a better Practitioner than he otherwise would be. The County Society can, and should be made to act as a post graduate school for the Physicians located in that County. By making use of its opportunities, it becomes the most potent agency for good work in elevating the general Practitioner and the Specialists, that we have at our command. Many of the opportunities and resources are not made use of, excepting to a very

limited extent, and in very few places.

In all of our larger Counties there is at least one Hospital. With the exception of one, no Hospital in the State is making use of its clinical material to teach Physicians. A large amount of material and a great opportunity is thereby wasted, to the detriment of the local Profession, and of the public in that County. The County Society can make use of a centrally located Hospital for the purpose of clinical instructions, and by increasing the organization of the Hospital, the individual members of the Profession can make use of many resources that are otherwise unobtainable to the individual Practitioner. The Hospital should have a well equipped Laboratory, a well managed X-Ray Department, a corps of men working in the various specialties of medicine. All these can, and should be used to great advantage by the general Practitioner.

To be available, the Hospital should be more under the control of the Profession, not in the financial nor executive management, but in the Medical and Surgical Departments, more voice in the affairs of the Hospital should be given Medical men who, by reason of their knowledge and personal interest, are better qualified to serve the Hospital.

Closer relationship between the Professions of a County and Hospital will be mutually advantageous, and both, the Profession and the Hospital, as well as the public in general, will be greatly benefitted.

There is a pressing necessity for our Hospitals being standardized. This increases their efficiency, prevents extravagances, and especially, should be done to furnish the State Board of Medical Examiners some basis to decide as to the fitness of the graduates of Training Schools. Our Medical School could make use of several Hospitals to place graduates for Internship. The standardization can be much sooner attained by closer relations between the Hospital and the Profession.

The American College of Surgeons, organized in 1913, has attempted to force the members of the Surgical Branch of the Profession to keep up their interest and do better Surgical work. The recently organized College of Physicians seems to be attempting the same thing with the Internists. Numerous Special Societies do the same thing for the various Specialties of Medicine. All these, however, limit their membership to a comparatively few; and then only to those who have shown some special aptitude. They, in no way, reach the larger part of our Profession, and only by acting as an incentive to study, are of any avail to most of our Practitioners.

Another means that we have at our command is by the development of a Medical Extension Course from our State Medical College. The Dean has been very much interested in this matter, and has given considerable time and thought to arranging the details of an Extension Course that can be made available to the various County Societies of the State. With the number of Full Time Chairs in that Institution, it seems to me that this could be made a most valuable addition to our resources in the development of efficient Physicians and Surgeons.

The County Society can take the place of every one, and do for them what the Special Societies do not even attempt. It can be the Post Graduate School for the Profession, where benefits can be obtained at slight expense and little inconvenience.

Every general Practitioner can

make use, to some degree, of its benefits. By bringing the Medical College into closer affiliation with the Profession, mutual good will be obtained.

In considering the glorious history that was made in our Profession in the early days of our State, we must be impressed with the large number of Physicians and Surgeons who made more than a local reputation. Many achieved world-wide renown, and many more were widely known over our country.

It has seemed that one of the reasons for the unusual proportion of Medical Giants was the South Carolina Medical Society, with the cooperation and assistance that it gave its members in Charleston. The Medical College was ranked among the best schools of the Country, and the Profession was distinguished far and wide.

We have inherited a history of splendid achievements. Never has the need been more urgent—never the opportunity greater. It is in our power to place the South Carolina Medical Profession in the front rank. We have the chance of being of great assistance to our State and our Country. It cannot be done by selfish means; but by cooperation and mutual assistance. We can make our State a Beacon Light for others to follow. With increased wealth, and a standard of health far above that of the present, South Carolina will advance to the forefront. The opprobrium of our high mortality, and a great degree of illiteracy, will vanish, and the State will take the place it should have in the Council of the Nation.

This cannot be attained with places that are pest holes of disease, with children that are dwarfed by infections, with a rural population handicapped by Typhoid and Malaria. But, with an efficient progressive Profession, our people will be taught, and will avoid the infections. Our Legislature will become Medically intelligent. The quack and the Charletan will be met with knowledge and truth; the Osteopath, the Chiro-practitioner, and the Christian Scientist will, like the "dodo" disappear. The patent medicine business will become only of historic interest.

Could every practicing Physician be an honest, intelligent member of this Association, and have taken advantage of his opportunities to develop his knowledge and make proper use of his abilities; the State and Municipal Health Board would not be supplicants for money, but would have to refuse to take that offered by the legislative bodies.

The difficulties met with are, in a large measure, to be placed at our door. Patients taking secret preparation, going to quacks and Charlatans, mean that some where some one has not done as they should, and the public has not the faith in their Physicians that they should have. In accusing them of ignorance and criticizing their judgment does not absolve us from our duties. We have not taught them as we should. We are our brothers keepers, and our responsibilities are not ended until the public has been instructed, attended to and cared for by every means at our command. And, in order that we carry out our duties, we, ourselves, must be competent.

VAGINAL CAESARIAN SECTION.

By G. F. Wilson, M. D., Charleston, S. C.

THE term Vaginal Caesarian section was used early in the 18th Century in the time of Baudeloque, who did not consider it a cor-

Read before First District Medical Association, Jan, 24, 1917, Charleston, S. C.

rect one, the method then being simply to make cervical incisions; Acconci of Italy devised a vaginal Caesarian but to the brilliant mind of Duhrssen is due the real credit of its conception, in 1895 and while it should have been termed anterior vaginal Hysterotomy, it deserves the name he gave it for it is indeed an operation not to be attempted by a beginner.

I have brought with me six plates of the operation, that I believe make it so plain that there is very little use to describe it at length. It is a two part operation on entirely different types of tissues—the first part consists in putting two strong traction ligatures one on each side of the cervix or using clamp forceps to draw cervix down and making a longitudinal incision of the mucous membrane of the vagina running from the cervix almost to the Urethra or a transverse one just in front of the cervix. I do not think a very long incision is necessary but only large enough to get a bent copper or Pryor speculum between the bladder and the anterior uterine wall, after the finger covered with gauze has separated the two structures as high as 10 cm above the internal os. I find an easy way to incise the vaginal mucous membrane is to make with a pair of long anteriorly curved scissors an incision in the anterior lip of the cervix and to cut the mucous membrane of the vagina backwards in the mediun line to within an inch or inch and a half of the urethra opening. None of the text books mention the difficulty met with at times in incising this membrane, but my experience leads me to adopt the above means of starting the incision when one encounters a vaginal wall with thick rugae and in which there is a small introitus.

The second stage consists in cutting the anterior uterine wall and to evacuate the uterus as soon as possible. By pulling down the uterus with the traction ligatures or forceps, the anterior wall is brought well into view, this is necessary and makes the operation much easier. It is very much facilitated by placing the traction forceps a little higher with each snip of the scissors, pulling the anterior wall down further, as suggested by Jeannin. This is not always possible for sometimes the broad ligaments and the pelvic connective tissue are oedematous and the uterus cannot be drawn down. The incision in this case has to be made by touch. One can feel very distinctly the tension of the anterior wall, however, and in that way keep in the middle line, an important point in order to avoid the collateral branches of the cervical and uterine arteries. It is surprising how little bleeding there is unless one goes over 10 cm when the liability of getting into the large uterine sinuses is very real and in addition the added danger of cutting the abdominal peritoneum; on the other hand, two short an incision is more dangerous because of the liability of laceration of the uterine wall in any direction, with the subsequent terrific hemorrhage, the impossibility of suturing the tear and the extreme difficulty of stopping the bleeding. Duhrssen advises the use of metreurynter or dilating bag placed in the uterus, filled with sterile water and pulled on before incising the anterior uterine wall. This is spoken of favorably by most authorities and is I think of chief service in the cases with ruptured membranes. In three of my cases in which the membranes were unruptured I did not see the necessity for the use of the bag, but I would have been very glad to have had the second sized one, in a recent case in which

the membranes were ruptured and in which there was a tetanic uterus, with marked contraction of Bandls Ring, a calamity met with some times in toxemic cases. The interior incision completed, the membranes presenting through the opening, calls for their rupture and the extraction of the child. The operator should calculate whether the opening is large enough to allow the occipito bregmatic circumference of the child's head to pass through. At term it measures 32, cm therefore if he does this operation after the beginning of the eighth month he must figure the size of the opening in the uterus. The operation is seldom performed where there is cervical dilatation, so that when the anterior wall is incised for 10 cm the opening can only be 20 cm with an allowance for the dilatation of the cervix of 4 cm. This allows an extreme maximum of 24 cm as the very limit of the circumference of the uterine opening through which no head at nine months can come. I wish to impress this fact on the minds of those who may do this work.

If you estimate the opening at more than 24 cm you will have to make an incision in the posterior wall of the uterus in a similar manner to the anterior but shorter. In fact Duhrssen did it as a routine. It is seldom necessary except at full term to make it over 4 cm; thus making a total of 30 to 32 cm circumference. The method of extraction of the child is left entirely to the operator, if one is a finished obstetrical operator he will use forceps and in that event give the child a better chance to live, but usually a Podalic version is done. In my last case because of hour glass contraction of the uterus around the child's neck it was impossible. The child's life is a small consideration when this operation is performed and it really makes little difference what method of extraction is used.

The placenta is extracted in ten minutes if not delivered promptly and the anterior and posterior uterine incisions closed with interrupted No. 2 chromic cat gut sutures. Relaxation and hemorrhage are the immediate dangers and Duhrssen, DeLee, Williams,Cragin and others advise packing the uterus, being careful not to pass any suture through the packing in the cervix to prevent its removal the following day. I have used packing only once and I felt sorry for that poor woman—imagine pulling out several yards of gauze through a cervix and from a contracted uterus that had a wound 12 c.m. long in it. She was an eclampticand it was enough to have thrown her into another convulsion. I made up my mind when I removed her packing not to pack eclamptics again but to take my chances with hemorrhage in these cases; having in mind the benefit of more dilution of the toxins and lessened risk of another convulsion.

The anterior uterine incision being closed, the next step is to close the vaginal wound; this is done from before forwards with a continuous cat gut suture, chromic No. 2. It is well to insert a narrow gauze wick at the utero vaginal junction for drainage and remove it the following morning. In primiparae with a small introitus and little preparatory softening it is a better plan to make a deep episiotomy wound on the side to which the occiput presents; at the beginning of the operation this gives more room and saves probably a ragged tear later. If it bleeds too freely it can be controlled by sutures for the time being.

Indications:

The indications for this operation are a necessity for a quick rapid de-

livery with as little shock as possible, in a woman who has an undilatable cervix or there exists an immediate demand for delivery; the patient's condition in both cases being desperate. Eclampsia, accidental hemorrhage, hyperemesis gravidarum and severe pulmonary or cardiac disease being the chief conditions calling for it; placenta previa was considered one, but is being gradually discarded, the cause of its exclusion being the altered pathological condition of the lower uterine segment and the probability of severe hemorrhage. The chief dangers of the operation are the liability of injury to the bladder, hemorrhage from laceration of the uterine wall when the incision is too short or too long and hemorrhage from the uterus from relaxation.

Its advantages lie in the fact that a good surgeon can perform it very rapidly even when the entire cervix is in-tact, that it does not involve the peritoneal cavity, does not throw but little extra work on the kidneys and there is very little shock. Desperate cases stand it better than the abdominal operations, there is no danger of intestinal adhesions, uterine or intestinal hernia, and lastly we can't say "once a Caesarian, always a Caesarian," a point stressed by Boyd of Philadelphia. It is by unanimous consent the ideal operation for eclampsia at the seventh month.

Its disadvantages and contraindications are: that it is a formidable operation and not to be attempted by a beginner unless in a hospital and with assistants who have been there before: the cervix does not always heal, rupture may occur again, leucorrhoea, granular inflammation, erosion of the cervix, etc. all of them are to be disregarded however when the patient is in imminent danger, but not to be when the cervix is soft and dilating bags can be used. It is taken for granted that there is no expectancy for the life of the child and this must always be explained to patients of the Roman Catholic Church. This operation is far safer and less brutal than attempts at forcible manual dilatation with forceps extraction through a tight cervix and will in time supplant accouchement force in the seventh and eighth month.

It is contraindicated where there is marked pelvic deformity with contraction and if the baby is dead. If the patient is a primiparae and the introitus is very small with conditions favorable and a live child a necessity the abdominal route had best be used.

Summary:

1. It should be performed by a surgeon of experience and if possible by one who has done it before.

2. Never attempt it without assistance and in a hospital preferably.

3. It is the ideal operation for a seven months eclampsia or a case of profuse accidental hemorrhage such as we see in abruptic placentae.

4. From the reports of the best men there are seldom any complications in subsequent labors.

THE STUDY OF MEDICINE.

W. F. R. Phillips, M. D., Charleston, S. C.

TWO separate themes are embodied in our subject; one, that of study as a process of method in itself; the other, the nature of the subject studied.

As the procedures of study are largely dependent upon the nature and accidents of the things studied, it will be advisable to consider first

An Address delivered at the opening of the Medical College, October 1, 1916,

what is comprised within the subject to be studied.

What then is medicine?

Two meanings occur; one, a quite restricted one, and the other, a very general one. The restricted meaning is: some drug, liquid or solid or even gaseous, taken as a remedy to relieve or cure disease. This meaning of the word we may dismiss as not within our purview; the general meaning of the word is the one we are concerned with. While it is practicable to frame a definition within not many words, it will suit better with our present purposes if we leave this definition to be assembled as a summary rather than to be enunciated at the beginning, as a text.

Of some things, it is easier to comprehend them, if they be of such a nature as to permit our viewing them in their beginnings or examining them during some of their various stages of development or assembly. Medicine is one of these; but we cannot undertake to do more than take glimpses of its development, and these but fugacious and at widely separated epochs.

If the question had been asked Hippocrates, what is medicine? We can imagine he would doubtless have replied that it was "an art which all men avail themselves of on the most important occasions, and the good operators and practitioners in which they hold in especial honor." Two thousand three hundred and odd years ago, the age of Hippocrates, medicine was an art, purely and simply; but even then, as the father of medicine himself declared, it "was of all the arts most noble." The beginnings of medicine we cannot determine, the mists of ages obscure the vista. Homer, whose era, and even whose very existence, is so uncertain that archeologists place his period as remote as, if not remoter than, one thousand years before our present era, represents the physician as a man of importance and dignity; and in the Iliad we find the blunt warrior, Idomeneus, greatly concerned over the wounded physician chieftain, Machaon, and exclaiming, "The wise physician skilled our wounds to heal, is more than armies to the public weal."

However, as an offset to the esteem and value that the early Hellenes placed upon the physician may be mentioned the probably contemporary estimate of the medical profession by the historian of Asa, king of Judah. We are informed in sacred writ that Asa, in the thirty-ninth year of his reign, "was diseased in his feet, until his disease was exceeding great; yet in his disease he sought not to the Lord but to the physicians. And Asa slept with his fathers." In such sententious irony was the value of the physicians of the chosen people appraised. The contemporary pharmacists of Judea appear to have been let off easier, nay, perhaps, with compliment; for we read that King Asa was buried in his own sepulchre and that they "laid him in the bed which was filled with sweet odours and divers kind of spices prepared by the apothecaries art; and they made a very great burning for him."

By common consent we accept Hellenic medicine as expounded by Hippocrates and his disciples as the foundation or, changing the simile, as the progenitor of modern medicine, which we trace in historical and professional continuity under various vicissitudes to the present day. But medicine as an art existed many ages before Hippocrates, and we may in imagination conceive how it must have been coeval with man himself. Indeed, it may have taken its first crude form with

our first talking and dimly reasoning anthropoid progenitors, being transmitted by them to us, their improved offspring. But it would take us too far afield to engage in such exercises of the imaginative faculty, pleasing and entertaining as they might be, even potentially profitable; for all rational, constructive speculations concerning our relations to our environments are the thresholds of discovery.

We take 400 years before the Christian era as the period when the collection of writings known as the works of Hippocrates had origin. How many of the reputed writings are the work of the great Greek physician, how many are genuine, how many spurious, are questions that have given rise to much discussion and many erudite investigations. The literature is enormous, and well it may be when we reflect that from the year 400 B. C. to the year of grace 1500, aye, even to the year 1628, the reputed opinions and teachings of Hippocrates constituted a veritable medical Bible, to be received, venerated, and accepted, as containing not only the true knowledge thereof within the ken of human ability.

For 2000 years medicine consisted in believing Hippocrates, expounding Hippocrates, practicing Hippocrates, and following Hippocrates. But unfortunately, and most regretably, in not following Hippocrates as we can believe he himself would have wished to be followed. For he was a collosal intellect, one that looms large on the far off horizon of the past, a very titan above the multitude.

The art of medicine as laid down in the writings of Hippocrates was devoted to careful attention to diet and to the general surroundings of the sick, to what we would call today the hygiene of the sick-room. More particularly than all else, was attention paid to the symptoms presented; as to what pains and distresses were experienced and what was the appearance, posture, and behavior of the patient. The natural history of the disease as so observed was most carefully noted and prognosis, or the art of foretelling the future course of the illness, was extolled as the cardinal virtue. Devoid of all instrumental aids of precision for examination, the Hippocratic physician made use of and cultivated the faculties of seeing, touching, feeling, hearing, and smelling, to a degree never excelled in any subsequent period of medical development. The whole Hippocratic medicine was reduced to a series of aphorisms, or rules, mostly dealing with dietetics, prognosis and treatment.

There was lacking, almost totally, and we cannot but wonder that it should be lacking, a knowledge of the very foundations upon which medicine alone can rest, a knowledge of the structure and of the functions of the human body, anatomy and physiology. When we consider how cheaply life was held; how wantonly it was sacrificed to passion, jealousy, suspicion, avarice, ambition, how prodigally it was expended in rapine and war; we cannot but marvel that the dead human body was held so sacred that to explore it for the purpose of learning its make-up, its mysteries of structure and function, was a sacrilege, a crime against religion and civilization.

Yet such was the state of affairs. For this reason, anatomy was but little known, and the anatomical knowledge of the physician of Hippocratic times was little more than that possessed by the average individual of the period, and extended little beyond recognizing the most elementary and obvious structures. It might aptly be likened to that possessed by the ordi-

nary farm hand of the present day, as gathered from his slaughtering of domestic animals for the table and the market. Much of the ancient anatomical knowledge, such as it was, was strangely perverted. But time is not granted to recount. Suffice it to say that as anatomy was so wanting, physiology could not be said to exist. Thus we can now see how in the dark groped our first men of medicine; what a game of blindman's buff was seriously played; how even the real facts that were caught were so often, almost invariably, misunderstood or misinterpreted. It is true a physiology was attempted; for it is not within us, never was within us, to see phenomena and not form ourselves some scheme to account for that which concerns us or interests us. So a physiology was constructed from the imagination. The life and health of the body was dependent upon four humors: blood, phlegm, yellow bile, and black bile. The due and proper proportions and activities of these humors was health, the reverse was disease or death, in keeping with the degree of the want of balance along the four.

So on the whole, Greek medicine of the fourth century before Christ was the art of prognosis, and of treatment, but not of diagnosis; analagous to the art of the sculptor, who skilfully chisels the marble into a replica of the graceful curves and exquisite lines and contours of his living model, but knows not, or but little, of what underlies and gives cause to the beauty and grace that he so faithfully reproduces. Thus it was that Greek medicine wrought, picturing vividly and truly the appearances of illness and injury, and without only the unaided criteria of observation and empiricism making wonderful guesses at prognosis and treatment.

From the Hippocratic era to the first century of the Roman Empire, and in the midst of a marvelous artistic civilization, medicine and the other natural sciences, such as they were, remained, for reasons difficult to comprehend, almost stationary. An epsiode in the interim that promised much, had only the initiative continued, occured in Egypt, following the partition of the empire of Alexander the Great; Herophilus and Erisistratus, Greek physicians, began in Alexandria the study of human anatomy; favored most probably, we can suppose, by the Egyptian practice of disemboweling the dead preparatory to embalming. Considerable and important discoveries were made regarding the human structure, but then came a stagnation that prevailed till the days of Galen, the second colossal figure in ancient medicine.

Galen lived from 130 to 200 of our era, but his works and his influence came down to the 17th century. Galen was a follower of Hippocrates, a disciple of the Master, but as great as the master. He summed up the teachings of Hippocrates, elucidating and adding thereto what little had been achieved by others in the lapsing centuries, and he contributed his own quota, a not inconsiderable contribution, and in anatomy, a very considerable one. And he did it all so thoroughly, so masterfully, that for the succeeding twelve centuries men saw wholly through the eyes of Galen and believed Galen rather than the evidences of their own senses and experiences.

In the work of Galen and the influence of that work, we behold a paradox: we see a great contribution to knowledge, that should have been an impelling and a compelling force to further knowledge, become a veritable Old Man of the Sea, weighing

down and strangling the spirit of progress for the succeeding twelve centuries, and only relinquishing his grasp, and not to be finally thrown off the back of progress, till after great effort and fierce struggle. We cannot today realize, and fail almost to comprehend, how such things could be. If Hippocrates had been the Old Testament, Galen became the New, and all that remained for succeeding generations of physicians was to interpret Galen as the fulfillment and consummation of medical knowledge; the new master expounding the old. And so medicine and the study of medicine vegetated in a soil intellectually arid until watered by the vernal rains of that period in general history that we call the renaissance, the rebirth of learning.

Interesting and profitable it would be, could we here pause to consider, to realize in our imagination, the mighty thing that was accomplished for humanity in this rebirth; to see how the centuries from the 12th to the 15th conceived, labored and brought forth. By the inscrutable workings of nature, mankind that for centuries had seemed indifferent, apathetic, indolent, ignorant, and contented with their ignorance, like Ephraim of old wedded to his idols, suddenly almost, became active, interested, inquisitive, emotional, animated with fervid desire for an acquaintance with the past and an insight as to the future. But we can notice only so much as relates directly to medicine and as indicates what medicine was becoming and what it was to become.

Medicine from its beginnings to the renaissance was an art, concerning itself only with the visible manifestations of disease and injury and endeavoring to apply to their relief the measures that an accumulated experience indicated. It had not sought for the real foundations of disease or it had sought but occasionally and at haphazard. The solid rock upon which the medical edifice could only be established began now to be searched for. The man destined to strike this rock was Andreas Vesalius, a Belgian, a young man, not to pass beyond his 28th year ere he should have so established the true foundation of medical knowledge and so effectually secured it that no future cataclysm could shake its stability. Vesalius was a pupil of the first Sylvius, who at the time taught anatomy and medicine at Paris. As was the custom, the teacher read or taught from Galen, and the human cadaver, which was occasionally dissected before the classes, was used to illustrate Galen, never to correct him. For still men saw only as Galen had written, and when the dead body mutely protested Galen's errors, the dead body was wrong, Galen was right. The dissections were not made by the teacher, his hands could not be soiled unfolding the sublimest work of the creator; but to do this was the province of menial attendants, unlearned barber-surgeons, while the learned professor looked on with his purblind eyes and pointed with his wand.

It was under such teaching that Vesalius and others with him sat, as hundreds of others before them had sat. This kind of teaching did not satisfy the inquisitive mind of the young Belgian. We are told that at the third dissection, Vesalius, who had made himself familiar with the dissection of the dog, "irritated beyond control at the rude handling of the ignorant barbers, pushing them on the side, completed the dissection in the way he knew it ought to be done."

"My anatomy would never have succeeded," says he, "had I when

working at medicine at Paris been willing that the viscera should be merely shown me and my fellow students at one or another public dissection by wholly unskilled barbers, and that in the most superficial way. I had to put my own hands to the business."

"**I had to put my own hands to the business,**" this, in epigram, was to be the future motto of all students of anatomy and of medicine, and of all the brilliant future of experimental science. Vesalius gave to the world his great work, **Fabrica Humani Corporis, The Structure of the Human Body,** in 1543. "This book," said the late distinguished physiologist, Sir Michael Foster, "is the beginning not only of modern anatomy but of modern physiology." The anatomy of Vesalius was the anatomy of man is it was, not as it was imagined to be, not as it was inferred to be from that of the brute creation.

By precept and by example, Vesalius taught that the truth rested upon no authority but the facts as they were laid bare to the eyes of the dissector; Galen was to be believed when Galen and the cadaver agreed; the cadaver, when they disagreed. From thence onwards the structure of the human body is fundamental to all medicine. We have not time to notice the advances in anatomical progress since the days of the **Fabrica Human Corporis,** but must now pass to the great event following, the necessary consequence of the work of Vesalius and his followers, namely, the discovery of the circulation of the blood by William Harvey and the foundation of a new science, physiology.

Vesalius recreated anatomy, made it a science, but he still taught the physiology of Galen. Not that he believed it or could reconcile it to the facts of structure, but because he had but time for one thing, to work in the vineyard of anatomy. So we find that for nearly a century, though anatomy was necessarily a part of medical study yet its direct contributions to medical practice were disappointing; this came from the Galenic physiology, the left arm of the Old Man of the Sea, that still retained its encircling grip about the throat of medical progress.

As the human body yielded up its secrets of structure, one by one, to the scalpel of anatomy, so too they began to point unmistakably to truer physiology. The valves of the veins, the valves of the heart, the equal sizes of the aorta and of the pulmonary artery, the equivalent sizes of the venae cavae and the pulmonary veins, the small mass of the lungs to the great volume of blood poured into them, the fact that the heart was a muscle; all these began to point in no equivocal manner to a truth, long unknown, but without a knowledge of which all the physiologies of the past had failed: the great fact that the blood moved from the left side of the heart to the arteries, from the arteries to the veins, from the veins to the right side of the heart, from the right side of the heart to the lungs, from the lungs to the left side of the heart, and thence again around; that there was a circulation of the blood and that it was the function of the heart to keep this circulation going. The fantastic ebb and flow of the blood within the vessels, the more fantastic spirits and the invisible pores by which the blood passed from the right side of the heart to the left, we can not take time to give account of, nor to enter into any description of the wholly erroneous and fatally misleading conception of the functions of the heart, the lungs, the blood and the blood vessels; all of which were destroyed by Har-

vey's "De Motu Cordis et Sanguis," published at Frankfort-on-Main, 1628. Nor can we today understand how it was that Harvey's great discovery had to fight a battle for recognition, numbering among its strongest antagonists some of the most distinguished teachers of anatomy, of the period. But such was the reverence for Galenic authority, and so long had veneration for authority held the mind in subjugation. The discovery of the circulation of the blood was revolutionary in its effects upon the conceptions of the functions not alone of the organs immediately concerned but of all the other organs and tissues of the body. It furnished a firm and stable foundation for a new science that was to be built and is still building upon it, the science of physiology, or of the ascertaining and explaining of how the manifold and marvelous activities, sensations, and appreciations of the organism are affected; of what after all is this thing that we call life.

Following closely upon the new and truer physiology reared upon Harvey's immortal discovery, we begin to notice another new entrant in the medical field, chemistry. Gold has had an attraction to man from the earliest times, and to acquire gold has been the ambition of civilized man in all periods of history. Theories were not wanting and beliefs were many that there existed means by which the baser metals could be transmuted to gold, philosopher's stones. So to find or to make these stones became an occupation, alchemy, and alchemists the forerunners of chemists. Again we must pass over the evolution of a wonderful and beneficient science with but the briefest notice of some of its most salient events as related to medicine.

From the times of Vesalius to those of Harvey, chemistry, evolving from alchemy, found its use only in the service of medicine, in making medicines in the restricted sense, and a little later as a special form, or school, of medicine, the so-called iatro-chemical school. But chemistry was not to be denied its true field, and from the mazes of alchemy and iatro-chemistry, Robert Boyle in his "Sceptical Chemist," (1662), pointed out the true work of chemistry: the study of the composition of substances. John Mayow, Rey, Priestly, Scheele and Cavendish began and forwarded chemical science, and Lavoisier perfected and established it as modern chemistry. Chemistry, as working at the composition of the human organism and all the things that enter into and come out of it, had from now on a scientific place in the study of medicine, and was destined to become one of the most important factors in its progress.

While chemistry was evolving from alchemy and mixing with medicine as iatro-chemistry, another branch of knowledge was in preparation to become a part of or to take an important part in medicine, physics; even to become for a time a school of medicine, iatro-physics, which sought to account for all medical phenomena on a mathematico-mechanical causation. Galileo, himself beginning life as a medical student, had already discovered the principle of the pendulum and used it in timing the pulse; he had invented the thermometer and introduced the telescope and was amazing the world with its revelations. Borelli, a follower of Galileo, if not an actual pupil, a professor of mathematics at Pisa, applied the new physics to the explanation of animal motion, and his posthumous work, "De Motu Anamalium," opened a new avenue of approach to the problems of physiology and furnished new methods and means to apply to their solution.

Galileo's telescope revealed the heavens in a new light and brought distant worlds into view. The microscope, which followed closely after, and as a cordollary to the telescope, was now to show the nearer myriad microcosms in and making integral parts of the animal body; it was to open up a new anatomy, microscopic anatomy or histology, an anatomy invisible to the unaided eye, yet one more vitally significant of function than any that had till then been known.

The microscope added a new subject to the study of medicine, or rather it added new subjects; because not only did it impart new significance to gross structure of the formed body but it furnished the means of seeing that body as it formed, as it passed from the egg to the adult. Embryology as a science was made possible. But the microscope was also to assist in another new field that was to be developed before embryology.

Giovanni De Monte, of Padua, in the first half of the 16th century had begun to examine the dead to find out the cause of death, to study morbid anatomy. The microscope brought to morbid anatomy the same revelations it had brought to normal anatomy, and there gradually developed the great science of pathology, or the science of disease processes.

In 1762, an Austrian physician, Plenciz, had reached from **a priori** reasoning the clear conclusion that the so-called acute contagious diseases were due to the growth of minute organisms within the body. Nearly a century was to elapse before Schonlein should discover that the disease of the scalp known as **favus** was due to the growth of a microscopic fungus. And a few years later the researches of the great French chemist, Pasteur, established the reality of the new world of living organisms that philosophers had speculated about vaguely and crudely, the world of the bacteria. In this, the microscope played an indispensable role. Chemistry too came in, and in one respect in an unlooked for manner, the analin dyes, discovered in 1856 by Sir William Perkin. For bacteria are very small and transparent, and the most powerful microscope will not show them unless they be rendered opaque or colored or highly refractive. The analin dyes proved to be the most general stains for such purposes, and for many of the most important of the disease producing organisms, the only stains that would color them.

Bacteriology, or the science of the bacteria, is quite recent, very young and new in the long history of medicine. It was not admitted into the family circle and into familiar and intimate association therein till well within the last quarter century. Nevertheless it has caused us to rewrite our pathology, to so innovate our treatment, to so change our conceptions of etiology, and the whole course of medical practice in its immediate utilitarian administration as to make it no exaggeration to assert that bacteriology has revolutionized medicine. The establishment of bacteriology gave definitiveness to hygiene, dimly practiced as an empirical art and closely akin to hygiene: and likewise there emerged a new science based upon bacteriological revelations and chemical investigations, the science of immunology, or of protective and therapeutic vaccination.

Jenner, as we all know, discovered the protective power of cowpox as against smallpox, vaccination. But the extension of the vaccine concept to other diseases and to the prevention of diseases in general had to await the work and genius of Pasteur. We

cannot take time, however, to say more of this new science than to state that already millions of beings, men and animals, are living today that without this would long ago have been dead.

While the great salient events we have so briefly and hastily passed in review, were evolving and developing, other less striking but important things were taking place and position in medicine. Of these, we may mention a few: the discovery of electricity by the anatomist, Luigi Galvani; of anethesia by Sir Humphrey Davy, and its beneficent developments by Wells, Morton, Simpson and others; the great utilitarian application by Lister, in 1860, of Pasteur's discoveries to the treatment of wounds, antiseptic surgery, the precursor of present day aseptic surgery; and the significant and far reaching effects of the first cerebral localization of function, the center of articulate speech, by Broca, in 1861. These and many other discoveries unmentioned, have been fruitful seed, falling upon good ground and bringing forth their hundred folds.

One other great contribution to knowledge, not directly medical yet influencing medicine as few other events have, Darwin's epoch making theory of the origin and descent of species. We cannot attempt to discuss the profound influence of this new conception of organic life; the illumination it throws backwards into the dense mists and clouds that have enshrouded the myriads of centuries that organic life has struggled for an existence; how it also irradiates the centuries yet to come, foreshadowing on the future our present responsibilities to those that are to succeed us in the earth's stewardship.

Nor should we pass unmentioned another epochal contribution to our knowledge, the rediscovered work of that remarkable man, Gregor Mendel, born a peasant, afterwards monk and later Abbott of Brunn. Mendel's experiments upon the plants of his cloister garden, made before 1865 and published in that year, demonstrated the physiological basis of heredity and gave us a new conception and realization of our potentialities and limitations. Heredity is no longer a speculation, it is a fact, and its laws are now working out with that results for the weal of man himself only the future can reveal; but that the principles discovered by Mendel have in their application to plant and brute life been productive already of great good to us, there is unquestioned and unmistakeable evidence. It was with Mendel's great work as it has often been with that of others, that he who accomplished it did not live to see it accepted. Though Mendel published his experiments in 1865, it was not till 1900, eighteen years after his death, that they were appreciated and understood.

We may now recapitulate the development of medicine. We notice that at first it was simply the doing and the giving of things that appeared to do good, to be helpful to the sick or injured. It did not understand what caused the illness, neither did it know the structure and the functioning the body it sought to heal; it stood upon no higher intellectual basis than any other empirical practice and occupation. A little later there came the consciousness of defects, and, one by one, attempts were made to supply the apparent deficiencies. The sequence in which progress was made was: first, the structure, or anatomy, of the body was acquired; then the functioning of the different parts, or physiology; following this, came the composition of the

parts and fluids, and that of the remedies that were used, or chemistry. After chemistry, came endeavors to find out the causes that worked to produce disease, pathology; and succeeding pathology, came the ascertaining of the manner in which the remedies used acted, or pharmacology. Many difficulties and obscurities in these inquiries encountered in man could not be overcome or made plain except by recourse to like inquiries upon other members of the organic world; so that we find that the anatomy, the physiology, the chemistry, the pathology, the pharmacology of medicine, extend to the consideration and use of all the information that the extension of these subjects of study to the lower members of the living world can furnish. In this extension, we discovered bacteriology and added it to our means both as an explanation of disease and as an instrumentality in cure and prevention. We have brought into service the science of physics, of evolution and of heredity, and in short, we have drawn upon all those fields of human inquiry that we call the natural sciences. From a simple empirical art we have developed into the most cosmopolitan and heterogeneous of sciences.

We may now define medicine as being that branch of human knowledge that has for its object, the relief of pain and the alleviation of suffering; the cure of disease, where cure is practicable; the amelioration of the effects of disease, where cure is impracticable; the repair of injury or the mitigation of its results within the limits of practicability; and, finally, the prevention of disease and the prolongation of life with the maximum of its functional efficiency.

To achieve these purposes medicine demands that the structure of the body in its various stages and conditions must be known; the functions and their control and coordination must be mastered; the deviations from the normal and their causes must be ascertained; the agencies capable to restore, correct, control, or otherwise favorably influence structure and function to normal must be recognized and studied; the means of prevention of disease and of the prolongation of life must be sought for and made available. No one source and no one science are adequate for all this.

Medicine, as we have endeavored to show, is not a pure science in itself, a something with fairly definite boundaries or borderlands delimiting it from other branches of human concern. It is rather a mosaic of the sciences, centered and building around the greatest desire of mankind, life in the full consciousness of health, life in its greatest efficiency. Around this center are assembled blocks chiseled from every gallery in the quarries of knowledge; arranged in a pattern whose design is working out as the mosiac grows, as new blocks are cut from nature's rocks of fact and are brought by the workers for examination as to their fitness to fill out some advancing edge, or to replace some already worked into the mosiac but which do not joint up to the satisfaction of the directing artist, reality.

We may now proceed to consider the first theme suggested in our subject, the study of medicine: that is, the method, the means, and the preparation of study; of the direction of the faculties of the mind and the powers and skill of the body to the acquisition of the particular knowledge desired.

It must be obvious from what has been said already that the methods of study as applied to medicine are observational, experimental, and judicial. The observational powers must be

trained not only to see dissimilarities but similiarities, resemblances as well as differences; to observe not only generally but in particular, in detail, in sequence; to observe precisely and to observe accurately; to observe quantitatively as well as qualitatively: to record methodically and truthfully, in clear language, grammatically correct and discriminatingly chosen; to record remembering, that the value of the record is wholly in its unmistakably meaning the same to another as to him who recorded it.

The experimental ability must be cultivated that it may give complete command of the individual over his muscles, nerves, his seeing, his feeling; over all the avenues by which the outside world passes inwards and becomes consciousness; by which it gives rise to that ultimate criterion of existence, **Cogito ergo sum, I think therefore I am.**

The judicial faculty must be developed that it may decide and discriminate with promptness and accuracy. In no other field of human activity is correct judgment of more value, of greater import, than in the daily work of the physician; and no more expressive summing up of the truth is to be found than in the first aphorism of Hippocrates: "Life is short and the Art long; the occasion urgent, experience fallacious and judgment difficult. The physician must not only be prepared to do what is right himself, but also to make the patient, the attendants, and the surroundings cooperate." Correct judgment can only be had from full knowledge obtained by observation and consideration and controlled by experiment. Where experimental control is impracticable or impossible, judgment must fall back upon analogies, the criteria of which have themselves been established by analysis and synthesis.

What are the means of study? We have, I think, seen that the means by which we study medicine, by which we fashion the various blocks of its wonderful mosiac, are the tools of what we call the physical and biological sciencies. The special armamentaria of medicine are insignificant in comparison to the instrumentalities it draws from sciences. The only peculiarly medical laboratorium of today is the hospital; the entire remainder of a modern medical school could as readily belong to any of the other schools of the experimental sciences. The hospital, the place where the ill, the injured, the halt, the deformed, the defective, the flotsam and jetsam on the sea of life, are drifted together; the hospital is the only peculiar instrumentality, the only badge of distinctiveness now of the medical school. All else that it once had that was worth while has been appropriated as it was found applicable to other fields of human study; and whatever else there was that other fields of human knowledge possessed that could and can aid in the peculiar problems of medicine has been and is taken without scruple to use in its work for humanity and civilization.

What of the preparation, of the training of the student himself? What **should** he bring with him to begin with; what **must** he bring with him. Let me go again to the great man of the early days of medicine: "Whoever is to acquire a complete knowledge of medicine," says Hippocrates, "should be possessed of the following advantages; a natural talent; a favorable position for study; education in youth; love of labor; time. First of all, a natural talent is required; for where nature opposes everything else is in

vain;.....He must also bring to the task a love of labor and perseverance.....But ignorance is a bad treasure and a bad friend to those that possess it, whether in opinion or reality, being devoid of self-reliance and contentedness and the nurse of both timidity and audacity. For timidity betrays the want of powers and audacity the want of skill. There are, indeed, two things, knowledge and opinion, of which the one makes its possessor really to know, the other to be ignorant." Is it needed that we should translate this into modern language; I think not. We have here all that mere words could express, but hardly more concisely, more aptly. Let us pass it with only this emphasis: the student of medicine cannot be too well educated, he cannot know too much, he may know too little. He is entering upon the study of not a subject but of many subjects, whose tentacles are widely attached and intertwined and whose antennae are vibrating in every direction ready to appreciate and transmit whatever knowledge may come to them; and he who would use this knowledge must be prepared to receive it: a broad general education and a wide acquaintance with the affairs of life is the best assurance of such preparedness. There is but one consideration that gives us pause, that causes us to draw back, to be satisfied not with that we know is best but with what is the best we can get, and this consideration is time, the time is required for preliminary preparation, the time consumed in professional preparation.

If we ask too much time to be devoted to preliminary training and general culture, we must cut off an equal amount from professional education. We face a dilemma, we are trying to seize both horns; whether we shall succeed or whether we shall not, must await future development. But while we wait, knowledge moves on, enlarging her frontiers, calling for more and more exertion and effort from those who would know her boundaries. If we are not prepared, we halt progress, but we, not progress, are the losers. Looking back into the record of the past there is written in now legible characters lost opportunities innumerable; years of suffering, years of unsatisfied want, that need not have been had only the time, the intellectual preparedness, been adequate, ready to seize its opportunities. For we must not suppose that the eyes of the men of old were all dull to the facts of nature. Many saw and saw clearly and proclaimed clearly. But what they showed was shown to other eyes that seeing saw not, to ears that hearing heard not, to minds that receiving comprehended not. And may we not profit by this, take it to ourselves and ponder over it. Are there not prophets among us prophesying not from the vision of dreams but from the facts of nature as they clearly see them. Are not these facts crowding around us, crowding, pushing, and and jostling us; calling to us, saying: see here, see there, see me; I can be useful to you, I can assist you, I can open the locked door that shuts you from your desire; I am opportunity; take me, use me; I will serve you, slave for you, only take me, only use me. Why not? Such clearly we see was the past; and are we not the children of our fathers; did they not moil and toil, stumble and fall, while struggling to place us where we now are; is not their heritage our heritage; and have we, sprung from their loins, shaken from us by miracle their fallibilities. Science today, in which we

pride ourselves says, No. Let us be proud of our ancestors, of their work, of their accomplishments. Let us be mindful that it is our duty to carry forward the work they began. What they builded truly, let us preserve; what they did faultily, let us tear down, but with reverence, with humility; remembering that others will come after us and after our work and will judge it.

Only when we appreciate what medicine is; what it has been; how it has advanced to its degree of perfection of today; how it must continue to advance, never ceasing to grow; only when we realize the labor with which so much has been accomplished; the time devoted; the lives generously given in its service; when we have done all this, then, I think, we enter into what Hippocrates meant when he said that, "Medicine is of all the Arts the most noble."

Gentlemen of the student bodies of Medicine and of Pharmacy, on behalf of the faculty, I welcome you as students and workers in the vineyards of your chosen professions.

SOCIETY REPORTS

ANDERSON.

Dr. Robert G. Witherspoon.

In the death of Dr. Robert G. Witherspoon which occurred on June 9th, 1916, the Anderson County Medical Society lost one of its oldest members.

Some forty years ago Dr. Witherspoon begun the practice of medicine in this County and was continuously at his post of duty until his death. Few physicians have had a wider field or a more varied experience as a family doctor as had Dr. Witherspoon. He choose to live in the country, but his practice was not confined to the community in which he lived, but was often called in consultation to neighboring towns.

Dr. Witherspoon had the happy faculty of keeping young in spirit while growing old in years. He kept up with the advance in medical science with as much zeal as the recent graduates and his skill as a diagnostician was recognized and valued throughout this section of the County.

His example of keeping up and keeping young while growing old in service has been, and will be, of much help as an example to the physicians he leaves behind him.

He had been a member of the County Society since the first year of his practice here and always sought to put into it the very best that he was capable of giving of service.

L. C. Sanders,
Secretary.

COLUMBIA.

The Columbia Medical Society met in regular session Monday, February 12, in the Arcade.

Meeting called to order by the President, Dr. LeGrande Guerry.

Under voluntary reports Dr. W. R. Barron reported a case of syphilitic nephritis treated by salvarsan intravenously, the symptoms disappearing gradually after each dose.

Dr. N. B. Edgarton reported a case

of polyuria which improved under pituitrin treatment, beginning with 1c c twice daily increasing to dram twice daily.

Dr. LaBruce Ward reported an obstetrical case in which a patient with two pregnancies had been aborted on account of deformed pelvis and tuberculosis. Examination revealed slight deformity. Patient was allowed to go to term. By the aid of an episiotomy labor was conducted successfully.

Dr. George Bunch gave an interesting account of his recent visit to Philadelphia. He referred to the various clinics and the work of the leading authorities of the city.

Under the head of business motion carried that the president appoint a committee of three to prepare a bulletin of operations at the hospitals.

Under miscellaneous business Dr. J. H. Taylor explained his attitude regarding the optometry bill.

Adjournment.

Edythe Welbourne,
Secretary.

ANDERSON COUNTY.

The two regular meetings in February gave evidence of the continued interest in the welfare of the Society. We are earnestly striving to put the Society upon more profitable basis and the beginning enthusiasm of the members is very gratifying.

On February 7th, during business session the following new members were enrolled:

Dr. Vernon W. Kay, Anderson, S. C.
Dr. J. C. Milford, Belton, S. C.
Dr. H. M. Daniels, Anderson, S. C.
Dr. Jeff Webb, Townville, S. C.

The scientific program consisted of an excellent paper on "Ectopic Pregnancy," by Dr. H. H. Harris. This paper was freely discussed and many features in differential diagnosis were brought out.

On February 21st, Drs. H. H. Acker, and C. H. Young gave us splendid papers on "Anaphylavis" with report of cases. The subject of Anaphylaxis is of particular scientific interest at this time and the Society is fortunate in having Drs. Acker and Young to present this topic for discussion and study.

We need a lot of team work to make the Society "Hum" and we are glad to report that this is beginning to be realized. Our idea is to put the Society upon such a plane that each member will get more than par value for his investment.

With this end in view we hope to report increased progress each month.

Fraternally yours,
L. Carl Sanders,
Secretary.

COLUMBIA.

The Columbia Medical Society met March 12, 1917, at the State Hospital where a psychiatric clinic has been prepared for the society by the hospital staff. Meeting called to order by the president Dr. LeGrande Guerry. Minutes of last meeting read and adopted. Secretary read a communication from councilman, C. M. Asbill pertaining to drug cases treated by the city requesting the co-operation of the physicians in withholding habit forming drugs. Letter from Dr. S. C. Baker of Sumter relative to the District Medical Association also read.

Under voluntary clinical reports Dr. W. R. Barron reported a case of strangulated hernia demonstrating the portion of bowel removed.

Dr. Finney of Baltimore, who was present was voted the privileges of the floor. In discussing Dr. Barron's report he stated that he met with but

few cases of strangulated hernia. Referred to two cases that were due to patients getting out of bed without their trusses. As to treatment, or method of operation, it was a matter of judgment, felt there was no hard and fast rule to follow.

Dr. Linsay Peters reported and demonstrated a case of post operative hernia following a gall bladder drainage.

Dr. W. C. Sandy of the State Hospital staff classified mental diseases referring to the old and new classifications. He mentioned that the psychoses of pellagra were separate from other forms of psychoses.

Dr. J. F. Munnerlyn also of the staff reported and demonstrated two cases of general paralysis illustrating two marked types. Dr. Sandy demonstrated a case of manic depressive insanity and a case of dementia praecox.

Dr. J. H. Taylor reported two surgical cases suffering from perforating duodenal ulcers. The first was an epileptic who recovered after a stormy convalescence. The second case was following typhoid fever in a patient suffering from mania depressive insanity. Patient recovered.

In discussing Dr. Taylor's cases Dr. Finney stated that as to the toilet of the peritoneum following perforating ulcers it was necessary only to get rid of the excess of foreign material that nature would take care of the rest.

Dr. Lindsay Peters asked about results upon gynecological conditions in the insane. It was stated that good results were obtained.

Following gall bladder and billary operations Dr. Finney has noticed mental disturbances, especially in cases past 50 years. Dr. Sandy replied by saying that possibly the delirium was due to morphine.

Under miscelleaneous business Dr. Fishburne announced that school inspection was moving along, and that the physicians were being called alphabetically.

Before adjournment Dr. Guerry thanked the hospital staff for the interesting scientific program they had prepared.

Adjournment.

Edythe Welbourne,
Secretary.

SUMTER.

The Seventh District Medical Association met here yesterday with a good attendance and a very interesting session was held. Several very instructive papers were read and discussed exhaustively by those present. Before adjournment it was decided to accept the invitation of Dr. Eaddy to hold the next meeting in Kingstree with the Williamsburg County Medical Association in September, the exact date to be set by the President and Secretary of the district Association in conjunction with the officers of the Williamsburg County Association.

Dr. William Weston of Columbia, was elected president of the district association and presided at the meeting, and Dr. Walter Cheyne of Sumter was chosen Secretary. Dr. Richard B. Furman of Privateer was elected Vice President. The morning session was held in the Elks' Club parlors and the afternoon session was continued at the Imperial Hotel, where an enjoyable dinner was served.

Dr. J. A. Mood read the first paper, "Heredity as a Factor in the Production of Crime."

Dr. Sandy's paper on "Classification of Mental Diseases," as used at present at the State Hospital, was an exhaustive discussion of the divisions and subdivisions of the mental diseases as classified through the latest

knowledge in the science of medicine.

Dr. M. H. Wyman read a paper on "Prevention of Venereal Diseases," as adapted from the report to the house of delegates. In discussing this paper, Dr. Williams pointed out that the relation between crime and the feeble minded is a fixed one, and in our effort to reduce crime, we are confronted with the question of the feeble minded. He doubted the methods of sterilization as effective, but favored segregation of the feeble minded under State control. The feeble minded are the most prolific class, he stated, and from a standpoint of economy steps should be taken to prevent reproduction of this class of unfit. In the State Hospital were as many people as in Clemson, Winthrop and the University of South Carolina combined and the State should certainly afford to segregate them.

Dr. Baker in discussing the question referred to it as one of the most important in the State. He said insanity was largely a matter of heredity. He thought that something ought to be done now. The males should be sterilized and the females segregated, he said. Dr. H. A. Mood, Dr. Walter Cheyne, Dr. Weinberg and Dr. Stuckey also discussed various phases of the question, bringing out new points in an interesting and instructive manner.

Dr. H. A. Mood read a paper on "Diagnosis and Treatment of Amoebic Dysentery," introducing chaparra amagosa, a new drug, which is expected to become a valuable addition to the pharmacopoea. Dr. Williams pointed out that this was not a rare disease, and Dr. Cheyne thanked Dr. Mood for his excellent paper.

"Duodenal Ulcer" was the subject of a well prepared paper read by Dr. W. E. Mills. At the conclusion of his paper adjournment was taken for dinner, after which the discussions were continued.

Dr. J. Fred Williams made a talk on the changes which had been made at the State hospital and outlined the treatment of patients at that institution, pointing out various methods in which physicians could aid those in charge of the hospital. His talk was a lucid explanation of methods in operation at the asylum. At the conclusion of his talk he answered a number of questions concerning the building. Dr. S. C. Baker, who is one of the regents of the State hospital, brought up the question of the training which the nurses get at the State hospital, and pointed out that at present it is practically as thorough as in a general hospital.

Dr. Milton Weinberg read a paper on "Practical and Systematic Examination of the Genito-Urinary Organs," which was elaborated by the discussions of Dr. Wyman and Dr. Cheyne.

A resolution offered by Dr. L. H. Jennings, offering changes in the constitution of the State Medical association, was voted down.

The Seventh District Medical Association embraces Richland, Sumter, Lee, Clarendon, Williamsburg and Georgetown counties. Among those attending the convention were: Drs. Weston, Williams, Sandy, Wyman, Columbia; Jennings and Corbett, Bishopville; Eaddy, Johnsonville; Stukes, Brown, Summerton, with nearly all of the Sumter Physicians.

Walter Cheyne, M. D.,
Secretary.

March 23, 1917.

PERSONAL AND NEWS ITEMS

INFORMATION REGARDING THE CORRELATED ACTIVITIES of the COUNCIL OF NATIONAL DEFENSE AND THE ADVISORY COMMISSION THE MEDICAL DEPARTMENTS OF GOVERNMENT and the COMMITTEE OF AMERICAN PHYSICIANS FOR MEDICAL PREPAREDNESS

MEDICAL PREPAREDNESS

Under existing conditions it is desirable that every physician as well as every other loyal citizen of America should be prepared to render active service to the Federal Government, remembering that the protection afforded by the Government has made it possible for its citizens to enjoy liberty, peace and prosperity.

The avenues through which the most effective service can be rendered by members of the medical profession have taken definite and concrete form. Briefly, the plan is that all medical activities should cooperate with the Council of National Defense.

It would seem desirable at this time to state explicitly just what the Council of National Defense and its various agencies are.

The Council of National Defense was created by Act of Congress, August 29th, 1916.

"Sec. 2. That a Council of National Defense is hereby established, for the coordination of industries and resources for the national security and welfare, to consist of the Secretary of War, the Secretary of the Navy, the Secretary of the Interior, the Secretary of Agriculture, the Secretary of Commerce, and the Secretary of Labor.

That the Council of National Defense shall nominate to the President, and the President shall appoint, an advisory commission, consisting of not more than seven persons, each of whom shall have special knowledge of some industry, public utility, or the development of some natural resource, or be otherwise specially qualified, in the opinion of the council, for the performance of the duties hereinafter provided. * * * * * * * * *

That the Council of National Defense shall adopt rules and regulations for the conduct of its work, which rules and regulations shall be subject to the approval of the President, and shall provide for the work of the advisory commission to the end that the special knowledge of such commission may be developed by suitable investigation, research, and inquiry and made available in conference and report for the use of the council; and the council may organize subordinate bodies for its assistance in special investigations, either by the employment of experts or by the creation of committees of specially qualified persons to serve without compensation, but to direct the investigations of experts so employed."

A committee of distinguished physicians was asked to present to the President, names of medical men suitable for membership on the advisory commission. Dr. Franklin H. Martin of Chicago was selected.

The following statement was issued by President Wilson on the night of October 11, 1916 in announcing his

appointment of the civilian advisory members of the council of National Defense.

"The Council of National Defense has been created because the Congress has realized that the country is best prepared for war when thoroughly prepared for peace. From an economic point of view there is now very little difference between the machinery required for commercial efficiency and that required for military purpose.

"In both cases the whole industrial mechanism must be organized in the most effective way. Upon this conception of the national welfare the council is organized in the words of the act for, the creation of relations which will render possible in time of need the immediate concentration and utilization of the resources of the nation.

"The organization of the council likewise opens up a new and direct channel of communication and cooperation between business and scientific men and all departments of the government, and it is hoped that it will in addition become a rallying point for civic bodies working for the national defense. The council's chief functions are:

"1. The coordination of all forms of transportation and the development of means of transportation to meet the military, industrial and commercial needs of the nation.

"2. The extension of the industrial mobilization work of the Committee on Industrial Preparedness of the Naval Consulting Board and complete information as to our present manufacturing and producing facilities adaptable to many sided uses of modern warfare will be procured, analyzed and made use of.

"One of the objects of the council will be to inform American manufacturers as to the part which they can and must play in national emergency. It is empowered to establish at once and maintain through subordinate bodies of specially qualified persons an auxiliary organization composed of men of the best creative and administrative capacity, capable of mobilizing to the utmost the resources of the country.

"The personnel of the council's advisory members, appointed without regard to party, marks the entrance of the non-partisan engineer and professional man into American governmental affairs and a wider scale than ever before. It is responsive to the increased demand for and need of business organization in public matters and for the presence there of the best specialists in their respective fields. In the present instance the time of some of the members of the Advisory Board could not be purchased. They serve the government without remuneration, efficiency being their sole object and Americanism their only motive."

As indicated above the Council of National Defense therefore consists of six members of the Cabinet as follows:

The Secretary of War, Chairman,
The Secretary of the Navy,
The Secretary of the Interior,
The Secretary of Agriculture,
The Secretary of Commerce,
The Secretary of Labor.

The Advisory Commission of the Council of National Defense consists of seven civilians appointed by the President. The members of the Advisory Commission are as follows:

Mr. Daniel Willard, President of the Baltimore and Ohio Railroad, Chairman.

Mr. Hollis Godfrey, LL.D., President of Drexel Institute, Philadelphia, Pa. (who is also chairman of the Commit-

tee on Industrial Preparedness of the Naval Consulting Board.)

Dr. Franklin H. Martin, of Chicago.

Mr. Bernard Baruch, Financier, of New York.

Mr. Julius Rosenwald, Vice-President of Sears, Roebuck & Company, of Chicago.

Mr. Samuel Gompers, President of the Federation of Labor.

The two bodies meet in joint session at frequent intervals for the purpose of considering problems relating to national defense.

The executive activities of the Council of National Defense are coordinated and carried out through the medium of the Director of the Council of National Defense, Mr. W. S. Gifford, and the chiefs of the various departments represented by the members of the Advisory Commission. Dr. Frank F. Simpson is chief of the Medical Section of the Council of National Defense.

THE ADVISORY COMMISSION.

The organization of the Council and of the Advisory commission provides that each member of the Advisory Comission shall gather about himself for the most effective coordination of the activities he represents, a committee or board consisting of representatives of governmental departments on the one hand, and civilian members on the other hand.

The Medical Committee, of which Dr. Franklin H. Martin is Chairman, consists of

Wm. C. Gorgas, Surgeon General of the U. S. Army.

Wm. C. Braisted, Surgeon General of the U. S. Navy.

Rupert Blue, Surgeon General of the U. S. Public Health Service.

Col. Jefferson R. Kean, Director General of Military Relief of the American Red Cross.

Dr. Wm. H. Welch, member of the National Council of Research.

Dr. Wm. J. Mayo, Chairman of the Committee of American Physicians for Medical Preparedness.

Dr. Frank F. Simpson, Chief of the Medical Section of the Council of National Defense, and Secretary of the Committee of American Physicians for Medical Preparedness.

Many medical problems which have bearing upon the national defense are considered by Dr. Martin's Committee and by the Advisory Commission and the Council of National Defense before being put into action by the governmental departments concerned.

COMMITTEE OF AMERICAN PHYSICIANS FOR MEDICAL PREPAREDNESS—ITS COMPONENT PARTS

National and State Committees.

In April, 1916, the national committee was appointed by the joint action of the presidents of the American Medical Association, the American Surgical Association, the Congress of American Physicians and Surgeons, The Clinical Congress of Surgeons of North America, and the American College of Surgeons. To that committee was delegated the responsible duty of formulating plans whereby the civilian medical resources of the United States might be ascertained and effectively coordinated for such purpose as might be required by the Federal Government.

The national committee organized, selected a chairman and secretary and and executive committee, and appointed a state committee of nine strong men in each state of the Union.

It is the fixed policy of this committee that all presidents and secretaries of the various state medical societies shall be members of their respective state committees during their incumbency in office. From the first it was

contemplated that at the proper time the organization of committees would be perfected in each county of the country. That time has now come and county committees are being rapidly organized.

In each instance the state committees are expected to select the county committees and to supervise their formation.

Name and Personnel of County Committees.

It is the fixed policy of the committee of American Physicians for Medical Preparedness that the various important medical interests and activities of each county shall be represented on the county committees. This is done for the purpose of coordinating the important interests and activities so that the medical profession of the nation may present a compact and effective organization for the purpose of aiding effectively in the national defense. In order that this plan may be carried out with uniformity and precision throughout the country, the various state committees have been requested to have all county committees bear the following distinguishing name, to-wit,

The Auxiliary Medical Defense Committee of .....County, in.....State. The state committees have also been requested to provide that the county committees shall include the following in their list of members.

1. All members of National Committee of the Committee of American Physicians for Medical Preparedness resident in the individual county.
2. Members of the State Committee resident in or near the individual county.
3. Representatives of the U. S. Army resident in the individual county.
4. Representatives of the U. S. Navy resident in the individual county.
5. Representatives of the U. S. Public Health Service resident in the individual county.
6. Representatives of the State Board of Medical Examiners residing in the individual county.
7. Representatives of the State or City Public Health Service.
8. Ranking Medical Officer of the National Guard.
9. President and Secretary of the local Medical Officers Reserve Corps Association, if there should be such an organization.
10. Deans of medical schools.
11. President and Secretary of the County Medical Society.
12. President and Secretary of any other important medical societies.
13. Medical Director of the local Red Cross Units.

DUTIES OF COUNTY COMMITTEES.

From time to time specific duties will be assigned to the various State and County committees. These duties will be in accord with the policy of the Council of National Defense, and should be executed promptly and precisely by those who are called upon to cooperate in this manner with the Council of National Defense.

The committee will call to their assistance those who have been appointed field aides by their various state committees and such other physicians as they may desire to have cooperate with them.

Among the specific duties which the county committees are requested to perform at this time are the following:

First: That these committees cooperate with the National and State Committees of the Committee of

Preparedness in their efforts to gain needful information regarding the American Physicians for Medical civilian medical resources of their own communities, and in their efforts to coordinate civilian medical activities for prompt mobilization in case of need.

Second: That they secure applicants:

(a) For the Army Medical Corps. If the President should call the full compliment of troops already authorized by Congress, the Regular Army would need about 1,200 additional medical officers. If a million men should be called, a corresponding increase would be required.

(b) For the Medical Officers' Reserve officers' Reserve Corps. If war should come, 20,000 to 30,000 medical Reserve officers should be enrolled.

(c) For the Naval Medical Corps which needs about 350 additional officers.

(d) For the Coast Defense Reserve Corps of the Navy. Several hundred high class reserve medical officers are desired.

(e) For the National Guard, such numbers as may be required to bring your local National Guard to full strength.

In the preparation for National Defense the first thing needed will be medical officers.

Physicians recommended for such service should be of the highest type. They should be free from suspicion of addiction to drugs or drink.

Medical Officers who go to field duty should by preference be under the age of forty-five.

Third. That they cooperate, individually and collectively, with the Medical Department of the Army, Navy and Public Health Service and with the Council of National Defense.

Fourth. That they cooperate with the Red Cross in their efforts to bring that organization to the highest point of efficiency.

Committee of American Physicians—Activities Accomplished and in Progress

On the 26 of April, 1916, the Executive Committee of the Committee of American Physicians tendered the services of the committee to the President of the United States. He expressed himself as being pleased with the patriotic tender of services and regretted that existing laws did not permit the acceptance by the Federal Government of gratuitous services, but stated that the matter would be referred to the Secretary of War and the Secretary of the Navy for the purpose of devising plans by which the good offices of the medical profession could be accepted and utilized to best effect by the Federal Government. He further stated that the plans would be referred to the Committee of American Physicians for comments and suggestions. The executive Committee was permitted to make suggestions regarding the bill creating the Council of National Defense.

During the last year this Committee and its various subsidiary bodies have been actively engaged in formulating and carrying out various activities in conformity with the general plans for national defense, which have been undertaken by the Federal Government.

The splendid work done by the various state and other committees was of such extent and value that the Council of National Defense at its first meeting requested the Committee of American Physicians to continue their various activities under the guidance of the Council of National Defense, and asked the Secretary of the Committee of American Physici-

ans to act as Chief of the Medical Section of the Council of National Defense. Since that time the various activities have gone forward with renewed energy.

Some of the activities which have either been completed or are well under way, follow:

1st. Some 20,000 medical men selected from all parts of the country have been classified according to the training and the kinds of work which they do best.

2nd. An inventory of hospitals and other medical institutions is well under way.

3rd. It has been the fixed policy of the Committee of American Physicians to aid the American Red Cross in bringing its medical department to the highest point of efficiency. With that object in view, and in order to foster the spirit of cooperation, the members of the National Committee of the Committee of American Physicians accepted invitations to become members of the National Committee of the Medical Department of the American Red Cross. In order further to promote the harmonious cooperation of the two organizations, most of the members of the various state committees of the Committee of American Physicians were also made members of the State Committees of the American Red Cross. The various county committees will also be expected to cooperate in carrying out the plans of the two organizations.

4th. The establishment of military training for senior medical students in a large percentage of the high grade medical schools of the country.

5th. The establishment of more effective military training for hospital groups for members of the Medical Officers Reserve Corps, for dental students, and others.

6th. The appointment of a Committee for the standardization of Medical and Surgical Supplies and Equipment. The purpose of this work is to designate a list of articles essential to the successful conduct of civilian and military medical and surgical activities so that in the event that it should become necessary to curtail production all of the energies of the drug and instrument makers would be devoted to necessary articles rather than to those which are desirable but not essential. On this Standardization Committee are representatives of the Army, the Navy, the Public Health Service, the Red Cross, the Council of National Defense and a number of the most distinguished members of the various specialities of civilian medicine. In their work of coordination and standardization this Committee will take Council with the manufacturers of the various supplies under consideration.

7th. Much valuable information supplied by medical and other observers who have worked in the war zones of Europe is being gathered and classified.

8th. The Presidents of important national medical organizations of the country have been requested to suggest to the medical section of the Council of National Defense the kinds of work which members of those organizations are best fitted to perform, and to suggest plans whereby their activities and resources might be utilized to best advantage. This request does not contemplate an inventory and organization of these resources. The purpose is that having received suggestions offered by the various organizations, those suggestions will be maturely considered and such as conform to the plans of the Council of National Defense and can be utilized to advantage, will be adopted. The various organizations will, in that

case, be requested to cooperate fully and promptly in perfecting the plans of the Council of National Defense.

The foregoing memorandum embodies only a very small percentage of the problems now under consideration. It is neither wise nor desirable, however, to present them in detail at this time.

PROGRAM SOUTHEASTERN SANITARY ASSOCIATION.
May 9 and 10, 1917.
Greenville, S. C.

Wednesday, 10 A. M.

Meeting called to order by President W. S. Rankin.

Invocation—Rev. Frank A. Juhan.

Address of Welcome—Hon. C. S. Webb, Mayor of Greenville.

Response.

President's Address—Dr. W. S. Rankin, State Health Officer of N. C., Raleigh, N. C.

"Public Health Progress in South Carolina"—Dr. Jas. A. Hayne, State Health Officer of S. C., Columbia.

"The Sanitarium and Infant Mortality"—E. A. Hines, M. D., Secy., S. C. Medical Society, Seneca.

"Pellagra"—Dr. Joseph Goldberger in charge Pellagra Investigations, U. S. Public Health Service, Washington, D. C.

General Discussion.

Recess.

Wednesday, 4 P. M.

"Some Observations Concerning the Five Major Causes of Preventable Deaths in the South"—By H. H. Shoulders, M. D., State Registrar of Vital Statistics, Nashville, Tenn.

Subject Unannounced—Dr. F. A. Coward, Director Laboratories State Board of Health, Columbia.

"A Tenative plan for the Elimination of Tuberculosis from a Given Community"—Dr. L. B. McBrayer, Supt. N. C. State Tuberculosis Sanatorium, Sanatorium, N. C.

"Tuberculosis in the Colored Race"—By Dr. Carl V. Reynolds, Health Officer, Asheville, N. C.

"The Borderland of Human and Veterinary Hygiene"—Peter F. Bahnsen, D. V. M. State Veterinarian, Atlanta, Ga.

"Relation of Oral Hygiene to Ideal Sanitation"—Dr. P. A. Pressly, Greenville.

General Discussion.

Recess.

Wednesday, 8:30 P. M.

"One Wonderful Night"—By the City of Greenville.

"Don't Spoil Your Appetite."

Absolute Informal.

Get Acquainted.

Thursday, 10 A. M.

"The Present Status of Milk Pasteurization"—Mr. Ernest Kelly, in charge, Market Milk Investigations, Department of Agriculture, Washington, D. C.

"Production of Clean Milk in Small Towns and Cities"—Dr. J. H. Epperson, Bacteriologist, Meat and Milk Inspector, Durham, N. C.

"Milk Contests as a Means of Improving the Milk Supplies in Cities"—Mr. J. A. Gamble, Market Milk Specialist, Department of Agriculture, Washington, D. C.

"The Food Value of Milk and other Dairy Products"—Mr. Alvin J. Reed, in charge Dairy Field Office N. C. Agricultural Experiment Station, W. Raleigh, N. C.

Subject Unannounced—Prof. J. M. Burgess, Clemson College.

General Discussion.

Recess.

Thursday, 4 P. M.

"Report of First Years Progress of Sanitation in Floyd County, Georgia"—Dr. M. M. McCord, Commissioner of Health, Rome, Ga.

"Report of the Sanitary Survey and what it Accomplished in Greenville County"—Dr. S. J. Taylor, County Health Officer, Greenville.

"The Possibilities of a Permanent County Health Board"—Dr. F. M. Routh, Field Director, State Board of Health, Columbia.

"Sanitation as a Factor in Rural Education"—Dr. L. A. Riser, M. D., Epidemiologist State Board of Health, Columbia.

"The Kaustine System of Sewerage Disposal"—Mr. L. P. Kilgore, Greenville.

Voluntary Papers.

General Discussion.

Adjournment.

GASTRIC ULCER.

The effect of gastric juice on the rate of healing of gastric and duodenal ulcers is taken up by L. R. Dragstedt, Chicago (Journal A. M. A., Feb. 3, 1917). It is well known that lesions of the gastric and duodenal mucosa heal readily in the presence of active gastric juice. Nevertheless the surgical treatemnt of gastric and duodenal ulcers has been based essentially on the theory that the gastric juice induces chronicity of these ulcers by digesting the exposed edges of the mucosa. If this is true it ought to be readily demonstrated in well controlled laboratory experiments, where one can eliminate most, if not all, of the undertermined factors. Sippy says that medical treatment, consisting of rest in bed with alkalies and highly nutritious food at frequent intervals, accelerates their healing, and Osler also advises rest in bed and easily digested foods as giving favorable results. Inaccurate diagnosis is at least one important factor in explaining apparent cures as shown in the Mayo Clinic. The good results following gastro-enterostomy for pyloric duo-



—by the President of the Victor Electric Corporation:

The ancient custom, that the purchaser must look out for himself lest the goods he buys are not as represented, is not the best spirit in today's American merchandising.

It is the desire of this new corporation to give concrete expression to the best thoughts and ideals of American merchandising by maintaining the highest possible standards of quality in product and in service to its customers.

The first rule written for the guidance of the Publicity Department reads as follows:

"All advertisements shall be absolutely truthful, both as to statements of facts and suggested ideas implied by copy."

This corporation is not posing as an ideal; but wishes to be understood as *striving* for ideals. The goods and the service are believed to be the best of today. There is being put into them more than mere expenditure of money—enthusiasm and loyalty to ideals. There is being wrought into the goods that which insures to the buyer articles even better than they are represented to be—that which evidences a sincerity of purpose.

C. F. Samms

denal ulcer must be carefully scrutinized in view of the work recently reported by Boas. As suggested by Carlson, relief from pain after alkalies or gastro-enterostomy may be due to other factors than the effects of gastric juice. Other authorities are quoted as bearing on the question of the healing or causation of ulcers and Rosenow has shown that the gastric and duodenal ulcers in man are usually infected through the blood stream, but the infecting focus may be at some distant point in the body. The importance of different germs and their virulence has not been sufficiently considered. Dragstedt describes his experimental procedure, using the regular Pawlow operation on dogs of producing a smaller separate stomach and in some making the outlet so high that the gastric juice could not escape from the pouch until after it had been completely filled. Ulcers were produced by injection of silver nitrate. Work was done on the duodenum by making a laparotomy through the right rectus and lifting the duodenum out of the incision. Then an injection of the silver nitrate was made. The results are stated as follows: "1. The average time required for the healing of the experimental ulcers in the Pawlow pouch, aranged so that there was at all times a quantity of active gastric juice in the pouch, was eight days. 2. The average time required for the healing of the ulcers in the pouches, in which there was a maximum drainage for the gastric juice, was nine days. 3. The average time required for the healing of the experimental ulcers in the duodenum, both in the presence and in the absence of acid chyme, was twenty days. 4. Animals killed and examined at necropsy before the ulcers in the duodenum were completely healed, showed ulcers in practically the same stage of healing in both cases. 5. Bacteriologic examination of the ulcers in five of the dogs showed a hemolytic streptococcus in pure culture in two cases, mixed staphylococcus and streptococcus in one case, B. coli in one case, and B. subtilis in one case. The examination was made with the technic of Dr. E. C. Rosenow." It would seem, therefore, that the digestive action of the gastric juice is not the important factor in delayed healing. The ulcers are, therefore, locally infected areas of the wall of the digestive tract. The surrounding tissues are hyperemic and probably become hyperexcitable. The bacteriologic examination of the ulcers shows that, in experimentally produced lesions, the chemical injury has subsequently become infected and it seems probable that the infection is direct from the alimentary tract. His conclusions are as follows: "1. The digestive activity of acute ulcers of the stomach and duodenum and the consequent formation of chronic ulcers. 2. Ulcers produced by the local injection of silver nitrate become subsequently infected with organisms probably from the alimentary tract."

DR. R. M. POLLITZER
of
Charleston, S. C.
Announces to the profession that his practice is restricted to Pediatrics.
Office: Commercial Bank Bldg.
Hours: 12 to 2.

POMPEIAN
OLIVE OIL
ALWAYS FRESH
It's very important that Physicians specify Pompeian Olive Oil when suggesting Olive Oil to patients, and insisting on patients securing this Standard Brand.
THE POMPEIAN COMPANY
GENOA, ITALY BALTIMORE, U. S. A.
THE STANDARD IMPORTED OLIVE OIL

KNEE JOINT DERANGEMENTS.

M. S. Henderson, Rochester, Minn. (Journal A. M. A., Feb. 3, 1917), after giving a sketch of the anatomy of the knee joint, classifies the derangement produced by intrinsic causes under the following heads: 1. Semilunar cartilages. 2. Loose bodies. (a) Chondral and osteochondral bodies; (b) foreign bodies. 3. Synovial fringes. 4. Crucial ligaments. He says there are few cases reported of derangements due to the semilunar cartilages in American literature, though in England there are many. He attributes this to the more general participation in athletic pastimes in that country than here. The cause is generally an injured internal semilunar cartilage but other causes may produce mechanical derangement. Every patient with these should have the benefit of a roentgenogram, as the diagnosis is often extremely difficult, before and even after operation. The treatment is either operative or nonoperative, and as a rule patients should not be operated on who give a history of only one locking. If seen immediately after the accident reduction should be made at once. Complete extension and the statement of the patient that the joint feels righ is evidence that the reduction has been accomplished. Rest in bed should be insisted on until the effusion has subsided and flexion of the knee and strain of the internal lateral ligament should be prevented for six weeks. In old cases in which there is a history of multiple lockings and the internal meniscus must be removed, the incision of choice is the condylar incision of Jones. It is not necessary to remove the entire cartilage, the anterior three-fifths is generally enough. Loose bodies of cartilaginous or osteocartilaginous consistency are common, either free or pedunculated. The origin of these bodies is discusssed. There is usually a history of direct injury to the internal condyle of the femur by falling on the flexed knee. In most of their cases of loose bodies at Rochester they were able to demonstrate by the Roentgen ray or by operation that they originated from the thick ring of the cartilage on the internal condyle. The symptoms are catching or locking of the joint with pain, followed by swelling, and repeated attacks generally tend to lessen the symptoms, so that the patient can sometimes localize the body himself, or the surgeon can localize it in the suprapatellar couch and holding it with his fingers extract it or fix it under local anesthesia. When this cannot be done general anesthesia and incision will be required. Foreign bodies require the same methods of operation but removal is even more urgent. Synovial fringes sometimes cause mechanical derangements but the symptoms are generally mild. Rupture of one or more of the crucial ligaments is a more serious and disabling derangement than those described. Henderson concludes as follows: "1. Damaged semilunar cartilages should be accorded the careful treatment by rest and fixation that is given an ordinary fracture of one of the long bones. Recurrent locking will then be an uncommon sequela. 2. Recurrent locking produced by a loose or fractured semilunar cartilage or loose body demands removal of the meiscus or body under the strictest asepsis. A judicial exploration of the joint should be made at the same time. 3. The condylar incision is the incision of choice for the removal of the semilunar cartilages. 4. For the removal of loose bodies, the split-patella incision is usually best. 5. A ruptured crucial ligament is better treated conservatively, than by operation."

Dr. Tyler's Private Hospital
For Surgical Patients

TELEPHONE 738 711 *E. NORTH ST.*

GREENVILLE, S. C.

Broadoaks Sanatorium

MORGANTON, N. C.

A private Hospital for the treatment of Nervous and Mental Diseases, Inebriety and Drug Habits. A home for selected Chronic Cases

ISAAC M. TAYLOR, M. D., Supt. and Resident Physician.

If you think of taking a

Post Graduate Course

in New York doctor, The Journal has something interesting to offer.

The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, $2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.
J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.
WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital, Boston, Mass.

OBSTETRICS AND GYNECOLOGY.
ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY
M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.
G. T. TYLER, M. D., Greenville, S. C.
R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.
J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.
E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

SHOULD PHYSICIANS TAKE VACATIONS? UNDOUBTEDLY; YES.

WHY?

FIRST—For rest. They need it both for body and mind. Other professional men—ministers, lawyers, and teachers take vacations. The duties of many of the professional men call them away from their local work. They obtain rest by change. But the physician's work is in the "round of his practice." If not varied, the physician's work may become a monotous grind. Other proftssional men have their holiday; they have their evenings and Sundays. The physician has no day (not even Sunday), nor night, that he can call his own. Therefore every physician should plan to take a vacation to recuperate his physical and mental powers.

SECOND—He should take vacations for study; to visit centers and ascertain the latest developments in his own specialty.

THIRD—He owes a duty to his family and should plan periodically to devote time to social and domestic life.

Dr. D. W. Cathell in his treatise on "The Physician Himstlf," says:

"Many busy physicians . . . foolishly postpone necessary relaxation . . . till from prolonged mental tension and physical strain, they become prime candidates for one or the other of the physician's two afflictions—organic heart disease or sclerosis of the cerebral arteries. A short rest will actually make you more philosophical and a better physi-



F. H. McLEOD, M. D.
President South Carolina Medical Association 1917.

Dr. F. H. McLeod was born in Richmond County, North Carolina February 26th, 1868. He graduated from the University of Tennessee in 1888. Subsepuent to his graduation he pursued Post Graduate Studies at the New York Polyclinic.

Dr. McLeod became a member of the South Carolina Medical Association in 1892 at the meeting of Georgetown. He has been honored on numerous occasions by the State Association. He has been a Councilor from his District and at one time was Editor-in-Chief of the Journal. He has also been President of his County Society and President of the Pee Dee Medical Society. Dr. McLeod established The Florence Infirmary in 1916 and as a result of his remarkable energy and executive ability this Institution fills a large field of usefulness to suffering humanity. Dr. McLeod limits his practice to Consultations and General Surgery.

cian when you return to your books and to your duties among the sick. Rec-reation is Re-creation."

WHERE?

That depends on his means, his tastes, etc. Some prefer the quiet of the mountain or seaside resort. Some go fishing or hunting. Others go to the cities where they get the advantages of libraries, clinics, etc. There are desirable trips by water to Alaska, up the Hudson; on the Great Lakes, There are the Yosemite, Yellowstone Park, the National Glacier Park, the Grand Canyon, the lakes of Michigan and Wisconsin; and the whole coast line, from Eastport, Me., to Tatoosn, Wash. Almost every state has its own watering places, or mountain resorts. This summer the American Medical Association Convention in New York City will be made the occasion of combining many of these features—the National Convention, the city, the seashore, the mountains, etc.

DOCTORS J. W. JERVEY AND J. W. CURRY, EXHONORATED OF THE CHARGES OF UNPROFESSIONAL AND UNETHICAL CONDUCT.

Under date of November 11th, 1916, the following communication was sent to Dr. J. W. Parker Secretary of the Greenville County Medical Society, Greenville, S C.

Dear Sir:

At a meeting of the Medical Staff of the Greenville City Hospital the following resolutions were adopted:

"Resolved from Special Committee of Hospital Staff.

"Whereas it has come to the attention of the Medical Staff that certain members of the Staff have applied for and accepted appointments from the Board of Governors, contrary to the resolutions of the Medical Staff of July, 1916, and to the Spirit and custom since the formation of the Hospital;

Therefore be it resolved that we most heartily condemn the action of such Members of Staff and that they should be subject to the strongest censure for their unprofessional and un-ethical conduct."

"Report from Special Committee of Hospital Staff.

"This Committee recommends the adoption of the following motion:

That a committee of three be appointed to prefer charges before the Greenville County Medical Society against Dr. J. W. Jervey, Dr. J. W. Curry and any others who have applied or may hereafter apply for or accept any appointment on the active Staff of the City Hospital, except thru the Medical Staff."

The Committee further charged that contrary to a rule adopted by the Greenville County Medical Society that members should not permit their names to appear in the public press, that Dr. J. W. Jervey has on several occasions violated this rule as per issues of Greenville Daily News of the following dates:

April 18, 24, 25 and 29, 1916.

All of which is respectfully submitted,

W. H. Powe, Chairman.
J. L. Anderson,
R. C. Bruce,
Committee.

The cases against Drs. J. W. Jervey and J. W. Curry were considered by the Board of Censors December 1, 1916, with the following result:

At a meeting of the Board of Censors of the Greenville County Medical Society, December 1st, 1916, the following motion was adopted:

It was the sense of the Board of Censors that the accused, Dr. J. W. Jervey and Dr. J. W. Curry were not guilty as charged.

Signed,
H. L. Shaw, Chairman.
Charles C. Geer, Secretary.
W. M. Burnett.

Subsequent to the action of the Board of Censors a resolution was adopted by the Greenville County Medical Society requesting the publication of the entire matter in the Journal of the South Carolina Medical Association. At a later meeting of the Society on motion the publication was ordered held up. Following these proceedings a petition was sent up to the House of Delegates and the Council of the South Carolina Medical Association by Drs. Jervey and Curry as follows:

PETITION.

The Undersigned Members of the Greenville County Medical Society Respectfully beg to Submit to the South Carolina Medical Association, its House of Delegates, and Council That

WHEREAS, charges of unprofessional and unethical conduct have been brought against certain reputable members in good standing in the Greenville County Medical Society, and information of the bringing of these charges has been spread through the State by newspaper articles and other methods unknown to the undersigned, and

WHEREAS, by unanimous verdict of the Board of Censors of the Greenville County Medical Society, after a full hearing, the charges were declared to be not sustained, and this verdict was approved by the Greenville County Medical Society in regular session, without a dissenting voice, and

WHEREAS, in the furtherance of justice to the accused and to the Society itself, the Greenville County Medical Society, in regular session, adopted a resolution requesting the publication in the Journal of the South Carolina Medical Association of the charges, the reply of the accused to the charges, and the report of the Board of Censors with the action of the Society thereon, and

WHEREAS, at a called meeting, called for another purpose, and contrary to all parliamentary usage, the action of the previous regular meeting was abrogated and held up, thereby preventing publication as before agreed upon, and

WHEREAS, in the opinion of the undersigned members of the Greenville County Medical Society it is essential in the interest of justice and fairplay to all concerned that this information be given in full to the profession of this State,

WE THEREFORE PRAY the South Carolina Medical Association, or its House of Delegates, or its Council, to order forwith the publication in full in the official journal of the Association, the charges above referred to, together with the reply of the accused thereto, and the findings of the Board of Censors thereon, with the action of the Greenville County Society adopting its report; and

WE FURTHER MEMORIALIZE the South Carolina Medical Asssociation, its House of Delegates and its Council to the end that they adopt some form of legislation which will tend in future to prevent the ill advised preferment of unwarrantable charges of a grave and serious nature against its decent and reputable members.

Done at Greenville, South Carolina,

April 12, 1917.

Davis Furman
G. T. Swandale
James E. Daniel
William L. Mauldin
S. J. Taylor
C. T. J. Giles
E. B. Hendrick
James L. Orr Ex-Member

(Re-instatement applied for)

Charles Geer
F. G. James
W. T. Brockman
S. E. Holtzclaw Ex-member
J. B. Hill
Geo. T. Tyler, Jr.,
J. W. Currie
M. T. Moore
W. E. Wright Ex-member
L. G. Corbett
W. H. Delk
T. G. Sharp
J. W. Jervey
J. M. Wallace
R. L. Marchant Ex-member
L. L. Richardson
M. C. Smith
John W. Dupree
Chas. W. Gentry
B. F. Goodlett
Chas. P. Benson
W. Y. McDaniel
Alva S. Pack
W. S. Pack
H. L. Shaw
J. M. Davis
F. Jordan
J. A. Thomason
J. P. DuPre

The House of Delegates on April 17th, received the petition and referred the same to the Council with instructions to make report at once. The following report, therefore, was presented by the Council and adopted by the House of Delegates.

REPORT OF COUNCIL.

Spartanburg, S. C., April 17th, 1917.
To the House of Delegates
of the South Carolina Medical Association.
Gentlemen:

The Board of Councilors, to whom the petition submitted by certain members of the Greenville County Medical Society to the House of Delegates was referred, begs to report that it has met and considered the questions involved in said petition.

No names were mentioned in the petition but Drs. J. W. Jervey and J. W. Curry of the Greenville County Medical Society stated that they were the parties alluded to in the petition.

Each party of the controversy made its showing. Dr. Powe, who represented the Greenville County Society claiming, however, that his Society had not been given sufficient time in which to prepare its answer to the appeal.

After carefully considering the matter the council, having first decided that in its opinion the Greenville Society had been given a reasonable opportunity to make its showing, unanimously recommend in view of all the facts presented:

1st. That the formal statement of charges of unethical and unprofessional conduct, as submitted to the Greenville County Medical Society against Drs. J. W. Jervey and J. W. Curry,, be printed in the Journal of the South Carolina Medical Association, together with the findings of the Board of Censors of the Greenville Medical Society exonorating Drs. Jervey and Curry from said charges, but that all the evidence adduced at the hearing and all comment upon it as it appeared in the full record of the investigation, be eliminated from the publication.

2nd. That in regard to the last

clause of the petition which seeks to restrict the bringing of such charges against a member of a Society, we see no practical way of limiting the matter and accordingly have no recommendation to make.

S. C. Baker, M. D.
Chairman of Council.

ORIGINAL ARTICLES

THE NECESSITY OF ROUTINE GENITO-URINARY EXAMINATIONS IN THE PRACTICE OF MEDICINE AND SURGERY.

By Milton Weinberg, M. D., Sumter, S. C.

IT must be admitted that the genito-urinary organs are an integral part of the human body. The anatomy brings these organs into direct connection with the whole organism. The physiology of the uro-genital system correlates their functions with those of the other organs. It is also a fact that pathological disturbances of these organs must necessarily bring about abnormal conditions to some or many of the remaining tissues.

Bearing in mind the proverbial saying of Hippocrates "Experience is fallacious and judgment difficult," and thinking of Sydenham, dubbed "the man of many doubts," we naturally and logically would recall to our minds whether or not there may be one or more pathological conditions of the genito-urinary organs to cause or enter into the cause or causes of the complaints of the patient who presents himself for examination.

The day of emirical medicine is past. Indeed, grateful for its past services, but to the scientific mind we may recall the bitter lines:

Alas! that all we loved of him should be
But for our grief as if had not been.

The tree of science in the past half century has borne fruits bountifully. The sciences of pathology, bacteriology, and physiology, along with many inventions as the microscope, x-ray, cystoscope, and others, have given us the foundations of understanding and the scientific application in the diagnosis and treatment of disease. To you, who are practical men, I need not go further than to quote Epicharmus, "Be sober and distrustful; these are the sinews of the understanding."

Gentlemen of the society, I am going to give a part of an address delivered by Dr. William Osler at the Universtiy of Minnesota.

He says: "More perhaps than any other professional man, the doctor has a curious—shall I say morbid?—sensitiveness (what he regards) personal error. In a way this is right; but it is too often accompanied by a cocksurenes of opinion which, if encouraged, leads him to so lively a conceit that the mere suggestion of mistake under any circumstances is regarded as a reflection on his honor, a reflection equally resented whether of lay or professional origin. Start out with the conviction that absolute truth is hard to reach in matters relating to our fellow creatures, healthy or diseased, that slips in ob-

Read before the 7th District Association Sumter, S. C., March 22, 1917.

servation are inevitable even with the best trained faculties, that errors in judgment must occur in the practice of an art which consists largely in balancing probabilities; start I say with this attitude of mind, and mistakes will be acknowledged and regretted: but instead of a slow process of self-deception, with every increasing inability to recognize truth, you will draw from your errors the very lessons which may enable you to avoid their repetition.

And, for the sake of what it brings, this grace of humility is a precious gift. When to the sessions of sweet silent thought you summon up the remembrance of your own imperfections, the faults of your brothers will seem less grievous, and, in the quaint language of Sir Thomas Browne, you will allow one eye for what is laudible in them.''

Now, why is there the necessity of routine genito-urinary examinations in the practice of medicine and surgery? Let us now go directly to the practical application of the text. The field and possibilities are entirely too large to treat fully in the scope of a paper yet only a few facts are necessary to convince the logical mind.

Suppose a patient consults you for the common symptom of headache. The only scientific precedure is to ascertain the cause. How are we going about it? I should think by obtaining a thorough history and afterwards making a complete physical examination. Is the genito-urinary tract to be excluded or passed up by merely an examination of the urine in this examination when we know that infection or disease in any portion of the tract may cause a headache. It may come from disease, acute or chronic, of the urethra, prostate, seminal vesicles, testicles, bladder, ureters or kidneys. Negative histories from the patients are no certain indication that there is not some disease of these or any of the other organs. Very seldom do we find a clinical syndrome pathognominitor the disease to make a diagnosis of the condition. The symptom of indigestion frequently the bane of the practictioners' life may arise from the genito-urinary tract. How are we to find this out unless we make careful examination? The condition called rheumatism, which as a rule is due to infection somewhere in the body frequently comes from infection somewhere in the urogenital tract.

Is it not of importance to the surgeon to ascertain from the renal functional test whether or not a patient is in an operable condition? Also, is it not of supreme importance to the surgeon to ascertain by cystoscopy and ureteral catherterization which kidney is diseased? These are merely a few instances to illustrate that careful urological examinations are absolutely necessary. There is another idea that I wish to impress upon the profession and that there is more to genito-urinary specialty than the venereal diseases. We have here to deal with some of the most highly organized and specialized organs of the body. If we wait to obtain symptoms referring to these organs before making an examination of them then we are doing ourselves and the patients a very great injustice. Then, too, when the symptoms do point directly to the urogenital system, it requires special training and special equipment and technique to ascertain the source and cause of the trouble. For example nearly all cases of renal tuberculosis first manifest themselves with bladder symptoms. Many cases of vesical

calculous resemble renal colic. Is it wise to wait until the patient is septic or uremic before making a correct diagnosis?

Hematuria is a serious symptom, which may be due to tumor, benign or malignant, stone, tuberculosis, syphilis, and various pathological conditions in some portion of the tract from the cortex of the kidney to the meatus. Only careful urological examination will reveal the true condition in very many instances.

Other things might be mentioned but I trust from what I have already said that these are sufficient.

I do not want to give the impression that every person who presents himself or herself or that every child should be put through a rigid genito-urinary examination. An absolute adherence to routine examinations of this kind is not practical in private practice and could only be carried out in a research hospital. Judgment must prevail in handling any case under a physician's care. However, I insist that many cases of obscure origin will be brought to light by the careful and systematic examination of the genito-urinary surgeon in routine work.

HEALTH EDUCATION IN RURAL DISTRICTS.

By L. A. Riser, M. D.
State Director Rural Sanitation, Columbia, S. C.

NO State has made more progress along all lines of education in the past five years than South Carolina, and especially is this true of education in the rural districts. This does not apply particulary to education in school rooms, but practical education of all kids. Tomato clubs, corn clubs, pig clubs, bread clubs have all had their effect on the minds of our boys and girls, instilling in them ideas which will gradually develop into proper thoughts of right living.

Seven years ago the first work of health education of any practical value was begun in South Carolina. At this time hookworm disease was recognized to be prevalent in the South, and as it was a disease which was easy to diagnose from microscopic findings, and easy to treat, it became a means to an end.

We took this disease as a type of intestinal disease which was due to bad sanitation, and we showed how it could be prevented by the use of sanitary closets. After a five years campaign along this line, we had visited every county in South Carolina, and reached thousands of people who began to think along the line of disease prevention. In the lectures which were given, illustrated by lantern slides, we stressed intestinal diseases, tuberculosis, diphtheria, small-pox, and other preventable diseases. It was shown that typhoid fever, a disease which every laymen was more or less familiar with, could be entirely stamped out by sanitation. We now began a different type of work; this was known as Community Work. We went in a county, held mass meeting in different communities, and selected two or more thickly settled communities where an interest was shown, and where we felt that we could get the co-operation of the people living in those communities. A school district or township was usually selected not to contain more than 200 families, and two or three communities were worked at the same time. We then spent several months with these people trying to make the community thoroughly sanitary. An effort was made to get a sanitary

Read before the South Carolina Medical Association Spartanburg, S. C., April 19th, 1917.

privy built at every home, church and school in this community. Lectures were given in these communities one night each week. These lectures were illustrated with lantern slides, and were on some special disease which could be prevented by proper methods of sanitation and hygiene. Negroes and whites were both taught in this way, and all seemed eager to help in bettering the health conditions of their communities. Assistant inspectors and carpenters were a part of each unit of work, and the carpenters were used in instances where we could not secure the services of a man in the home to help build the sanitary privies. After two years of intense community health work, we are extending our work to the counties for one year. We have two counties in the State which have taken advantage of this work for 1917. We are asking the counties to appropriate $2,000 to assist in this campaign for bettering health conditions. Orangeburg and Greenwood have pledged this amount, and intensive health campaigns are being carried on in these counties. In Greenwood a mass meeting of citizens was held; this meeting was called by a layman, and was attended by citizens from all over the county. A resolution was unanimously adopted asking the Greenwood Delegation to give $2,000, and Greenwood was the first county to pledge the money. Orangeburg came in soon after, and other counties were ready to appropriate, but the prospects of war, and the cry of economy which came up at this time caused the work to be put off another year. The State Legislature this year gave us sufficient funds to pay one third of the cost of this work, and the other third comes from the International Health Board.

These counties in addition to the better health advantages which they will derive from a campaign for better health will be extensively advertised all over the country, and when a man is looking for a place to live in the South, he will naturally select a place where the lives of his family are protected. The West has been settled up with thrifty citizens from Norway, Sweden and Denmark. These people selected the West because they were told they could not live in the South on account of health conditions. Many of them are now seeking homes in the South where the climatic conditions are more favorable. Already inquiries are coming in to the counties where these health campaigns are carried on.

At the end of 1917, these counties will not be satisfied to go back to the old conditions, and they will put on a permanent health organization to continue health work, and build up their rural communities by bettering health conditions. Other counties are getting ready for work next year, and in five years more, South Carolina will have built up the greatest health organization in the South.

At present, our health units for a county consists of a physician trained in health work, who is giving his full time, and with him are two to six field inspectors. A house to house canvass is being made, and when the country work is completed, we hope to have visited every home, and taught the lessons of sanitation to every person in the county. The importance of this campaign of health education can not be reckoned in dollars and cents. The counties which have been farsighted enough to take up work of this nature, in the interest of their citizens, are doing the biggest piece of work now being done in the United States. Watch Orange-

burg and Greenwood Counties---these progressive counties are entering the spirit of this movement with enthusiasm. They art setting the pace in health conversation, and they are teaching their people how to safeguard and improve their most valuable asset, the public health.

PSYCHIATRY AND THE GENERAL PRACTICIONER.

By William C. Sandy, M. D.,
Medical Director, The State Hospital for the Insane, Columbia, S. C.

PSYCHIATRY, as a special branch of medicine, has long been neglected not only by the general practitioner but also by the Medical School. Thanks to the growing interest in mental disease however, aroused by better methods of study, treatment and care in hospitals for the insane, a more widespread knowledge of insanity from a scientific aspect has resulted.

In the process of evolution from the Asylum to the Hospital, the sphere of influence of those engaged in the treatment and care of the insane has become greatly enlarged. The facilities for advice, observation and treatment have been extended by the establishment of out patient departments in the large centers of population and psychiatric wards in general hospitals. The general practicioner can no longer hold himself aloof from psychiatry as it's problems are being more and more generally recognized as intimately connected with general medicine and the welfare of the public.

A practical working knowledge of psychiatry is essential for the physician for a number of reasons. Those making a special study of mental disease generally do not see patients in the early stages of psychosis development. Much of what can be done in a prophylactic way must be left to the general practicioner who is first consulted and who as a rule sees the patient much earlier than the psychiatrist. When it is remembered that prophylaxis has come to be more and more universally recognized as the only possible solution of the problem of the increasing burden of the insane, the importance of pschiatry to the general practicioner must be admitted.

Moreover, it is the general practicioner who is called upon to make the initial examination and sign the medical certificate which is largely responsible for the confinement of the patient in a hospital for the insane. Too many men lightly regard the placing of their signatures to a commitment paper, an act which deprives an individual of his liberty and other constitutional rights it may be for a life time. This examination of the mental condition cannot be too conscientiously and carefully made. The ability to recognize salient features of the previous history and symptomatology of a patient will enable the commiting physicians to make out a truly valuable paper, one which will render real assistance to the hospital staff in reaching a definite diagnosis and instituting effective treatment. A knowledge of psychiatry may also save a physician from embarassing criticism or legal difficulties in matters of the commitment of patients to hospitals or court testimony in lunacy proceedings.

The early recognition of mental disease is important not only because of the desirability of taking general prophylactic measures, but also because there is a real advantage in

Read before the South Carolina Medical Association Spartanburg, S. C., April 18, 1917.

prompt treatment. The institution of treatment early in the course of mental disease tends to lessen the severity and shorten the duration of the attack. Thus, in recoverable cases, where commitment has been necessary the length of the hospital residence is also shortened; of vital importance to the patient, dependent upon whom there may be a needy family, and of economic significance to the State, whose resources are heavily taxed in the case of the insane.

It behooves the general practicioner to have a knowledge of psychiatry and the ability to recognize the symptoms and physical signs ushering in an attack of insanity as a measure of protection for the patient, his relatives and the public at large. For example, general paralysis, protean in its psychical manifestations but presenting even in its incipiency definite physical signs has more than once imperilled the happiness, financial welfare, reputation and lives of the patient, relatives and even the public at large before the condition was recognized and steps taken to safeguard all concerned. A marked change in disposition and habits in a middle-aged person or a definite psychosis developing at that period for the first time should always make one think of general paralysis. Pupillary changes, speech defects, reflex alteration, a history of general convulsions should all be looked for and suspicious signs confirmed or ruled out by the laboratory findings in respect to the blood serum and spinal fluid, syphilis being the primary cause of general paralysis.

There are certain delusional states, usually of a slow, progressive but insidious onset, characterized by ideas of persecution and often accompanied by hallucinations of hearing. Individuals suffering from these may become a menace to the safety of the public, because they are prone to brood over their imaginary wrongs and finally seek revenge. Recognition of such conditions should lead at once to placing the patient under observation as a matter of protection and in this way many a tragedy may by averted.

Persons showing unusually severe depression from real or fancied difficulties should receive careful and constant supervision on account of the ever present danger of suicidal attempts.

These are only a few of many conditions which should cause the physician to investigate the mental status of the patient and to take measures, if it is so indicated for his proper treatment or care.

Mention has already been made of the importance of prophylaxis in the solution of the problem of the increasing burden of the insane. It has also been pointed out that the general practitioner, seeing the patient earlier, is in a better position to take preventive measures than the psychiatrist. In considering how prophylaxis in mental disease may be applied, it is well first to discuss as definitely as possible the etiology of insanity. It is not unusual for some accidental or coincident event, or something which may have rather resulted from the abnormal mental state to be assigned in the commitment papers as the etiological factor. It is quite generally accepted, however, at least in a statistical way, that there are three great fundamental or essential causes upon which as a basis, insanity may develop, namely, heredity, alcohol and syphilis.

Students of heredity, adapting the so-called mendelian theory, have found that parents with certain

known characteristics or unit traits may be expected to have children, a definite proportion of which will exhibit similar traits. It is difficult to differentiate as yet the various unit characters or traits but at present by heredity is meant not so much an actual inheritance of insanity but rather a predisposition, an unstable mental make-up or psychopathic constitution. Such persons lack some quality, the absence of which causes them to become upset mentally by circumstances or conditions which a normal person is able to overcome, resist or bear.

Alcohol, in a somewhat varying degree according to the locality being considered, is a real factor in the causation of insanity, in New York state being an etiological factor in over twelve per cent of admissions. When one considers the multitude who constantly use alcoholic beverages, alcoholic psychoses are very infequent and it is becoming more and more the belief that psychoses develop in some of those who use alcohol because of an inherent constitutional defect or weakness. In other words, alcohol is often only an exciting factor which may simply bring to light a neuropathic state or an actual pre-existing psychosis. Thus defective heredity may be the basis for many if not all the alcoholic psychopathic states.

Syphilis is an undoubted causal agent in the various cerebral luetic conditions, the special type, general paralysis of the insane or paresis, and in certain cerebral arterio sclerotic conditions. In the New York State Hospitals over fourteen per cent of first admissions were directly traceable to syphilis. The spread of syphilis is closely linked with the evil of prostitution and when it is remembered that a large percentage of prostitutes are feeble-minded, heredity is again found as in the alcoholic psychoses, to bear an intimate though indirect relationship in the development of the syphilitic psychoses.

The limits of this paper will admit only a reference to the contributory or exciting causes of the psychoses. These are very numerous and many times are perhaps accidental or incidental. Actual injuries to the brain may cause insanity but these instances are comparatively rare. Infectious diseases, toxic conditions, child bearing, pellagra—a very prolific cause of admission to the South Carolina State Hospital—and other influences tending to reduce the general vitality, are frequently associated with insanity as contributory factors. The so-called "mental" and "moral" causes bear a similar relationship, causes such as financial or marital difficulties, death of relatives, disappointments of various kinds.

Many if not all of the contributory or exciting causes are experienced by almost every one in general. It can be readily seen, therefore, that it would not be logical or true to consider these alone as sufficient to bring about a psychosis and it must be the conclusion that a basis of a neuropathic constitution or a natural predisposition towards the development of insanity has existed in these persons who are unable to make a normal readjustment of their difficulties.

From the brief consideration of the etiology of insanity, it has been shown that heredity in the sense of a neuropathic constitution is a most constant element in the development of the psychoses. As a prophylactic aid, therefore, any method of successfully combatting the hereditary influences and their effects must be important.

So far, regulation of marriage so as

to rule out the unfit either by compulsory physical examination or otherwise, and the sterilization of certain classes such as the feeble minded, has proven to be a disappointment except in a few isolated instances. In some states, laws have been placed upon the statute books with the above in view but they have simply become dead letters on account of the question of constitutionality. On the other hand, publicity at present seems to be the most practicable prophylactic measure and popular lectures on marriage, sex hygiene, feeble mindedness and so forth should prove to be of value in counteracting the marriage of the unfit. To prevent the increase of the feeble minded there is no plan at present more practicable than the segregation especially of the females during the childbearing age. The cost would be large but not so great as would be the cost of the many decendents of these persons if at large.

Having neuropathic tendencies quite generally to combat, the physician can confer a public benefit by encouraging and advocating all popular movements looking towards the betterment of the race. Included in such are "better babies" movements, propaganda designed to instruct in the management of older children, the conduct of the home, the establishment of outdoor playgrounds, the medical inspection of school children and the formation of special classes, efforts toward individual education and to modify the course of study with some regard to natural inclinations and aptitude of the individual, instruction in sex hygiene, the medical examination of criminals and elimination of the defective or those having psychoses.

In combatting alcohol, the physician can assist the spreading prohibition movement by reducing his prescribing of alcoholic preparations to a minimum.

Radical legislation is needed upon the question of syphilis. It might be made a reportable disease and thorough treatment compulsory under supervision of civil health authorities. Community, institutional and other Wassermann surveys with prompt treatment of those indicated cannot be conducted too often. The question of prostitution, so closely connected with the spread of syphilis, is too broad and difficult for present discussion but certainly regulation is necessary. As mentioned before, probably in the education of the public lies one of the strongest hopes for future mental betterment and the general practicioner can do much to bring the people to realize the evils of marriage of the unfit, the dangers of venereal and other excesses, the necessity for right living and the value of a healthy mental attitude toward the world.

The practising physician may greatly assist in the rehabilitation of paroled patients. Through the system of parole in vogue in most State Hospitals, suitable patients by reason of improvement or recovery may be given an opportunity for the trial return to self support for a period of some months. During this time the patient may return to the Hospital for further care and treatment without a repetition of the legal formalities should it be deemed necessary. Many people do not realize the difficulties met by the patient who returns home where he is often viewed with suspicion, his actions criticized should there be a real or fancied deviation from the normal, no matter how slight it may be. The public should be informed that many varieties of insanity are

curable and that it is not true that "once insane always insane." The physician should encourage a sympathetic and helpful attitude upon the part of the public. The paroled patient should be given a chance, a congenial and suitable occupation, a proper environment and should the physician observe evidence of a recurrence of the psychoses or other indications making it seem desirable that he should be returned, such should be arranged in the most inconspicious manner.

The physician should also spread abroad the truth of the fact that the possession of a neuropathic constitution or insane heredity does not necessarily mean the development at some time of a psychoses and that the latter may be avoided through the safe guards of proper mental attitude, environment and mental hygiene.

Valuable information upon the various phases of the question of insanity may be obtained from the "National Committee for Mental Hygiene," which is a most active agency for promoting prophylaxis in mental disease. The services of this organization are at the disposal of both individuals and communities in the interests of the prevention of mental disease and the welfare of the insane.

In conclusion, the writer would again emphasize the importance of a knowledge of psychiatry for the general practicioner. It has been the endeavor to show in a few ways how such a knowledge is essential first, to the physician himself, in better qualifying him to certify as to the mental condition of patients; second, to the patient, in enabling him to obtain the advantage of early treatment; third to the public, the relatives and the patients themselves, in safe guarding their various interests. It has also been pointed out how prophylaxis has come to be more and more universally recognized as the only possible solution of the problem of the increasing burden of the insane and how the general practitioner should be an active force for prevention in combatting heredity, alcohol and syphilis, and in assisting in the rehabilitation of paroled patients.

THE REPORT OF A SERIES OF THREE HUNDRED CATARACT OPERATIONS.

By Charles W. Kollock, M. D.,
Charleston, S. C.

THE cases included in this report were not selected for operation with the idea of obtaining best results but were taken as they applied for treatment. Some were in excellent physical condition and the operations were performed in hospitals or comfortable homes where they received careful attention. Others were less fortunate for during the periods when I held no hospital appointment many operations were performed where the surroundings were anything but sanitary and the patients received little attention besides that rendered by myself during my daily visits. One poor old negro man lived with his daughter in a room that was dark, dismal and dirty and in order that better light and cleaner place for the operation might be obtained he was moved onto a small piazza and placed upon a rickety bench where the operation was performed. A day or two later the daughter deserted the old man and there after it devolved upon me to attend him professionally and to furnish him food. The result was highly suc-

Read by title before the South Carolina Medical Association, Spartanburg, S. C., April 19th, 1917.

cessful and later, after the other eye had been similarly treated, I had the satisfaction of seeing him earn a living for several years by sawing wood. Among these people, in their questionable surroundings, my results were astonishingly good.

Operations are reported as successful when sufficient vision was obtained for the patients to go about unaided as far as the vision was concerned. Of the three hundred operations two hundred and seventy one were successful, fifteen were total failures and the results in fourteen were doubtful, as some of these were lost sight of before the final results were known, but it is quite probable that in some of them, at least, the vision was not entirely lost. One eye was lost by the patient getting out of bed, on the day after the operation, and striking the eye against an hard object which caused iritis and hemorrhage into the vitreous. One extraction was immediately followed by uncontrollable retinal hemorrhage which forced the contents of the globe through the corneal incision and necessitated immediate enucleation.

In another where there had been an old iritis a resulting hemorrhage made enucleation necessary. In another the cataract concealed an intraocular growth (which did not interfere before the operation with light perception and projection). It grew rapidly after the operation and caused death in a short time. One case was glaucomatous and no vision was saved.

One hundred and fifty six patients were whites and one hundred and forty four mulattoes and negroes. Two hundred and ninety operations were extractions and ten were by discission. Ten were traumatic cataracts, three were congenital, nine were consecutive or secondary to inflammation of some portions of the uveal tract, two were soft, and five were dislocated. In fifteen operations vitreous humor escaped; four lenses were delivered in the capsules and in a small number of operations no iridectomy was done which was principally due to the escape of vitreous as soon as the corneal incision had been made, or the extreme nervousness of the patient rendered it unsafe. There were three black cataracts. One case was a young diabetic in whom the result was excellent. The oldest patient was a negro woman of nine-one years, in whom both eyes were successfully treated, and the youngest, a white child, was one year old and successfully treated by numerous discissions in both eyes. In one case, a distinguished physician of Charleston, eighty-nine years of age the most acute vision for both far and near was obtained. In one case where the vitreous escaped was the eye lost but in one the resulting vision was evidently impaired by the accident. In all cases where the escape of vitreous preceded the extraction of the lens, or where the latter had been dislocated, the cataract was removed by the loop. In a case of buphthalmus, where the cornea was not only bulged but of paper-like thinness, the cataract was easily extracted and prompt healing followed. While a number of lenses were successfully removed in the capsules the operation of Major Smith was done but twice. Good results were obtained in nearly all of the consecutive cataracts though in a number it was necessary to repeat the openings in the thickened capsules several times. The incisions for extraction was usually made in the corneo-scleral junction and without a conjunctival flap. An iridectomy was made in nearly all cases. The capsule was opened by tearing, after which it has been my custom to remove the speculum and express the lens by pressure made with the spoon

or finger through the lower lid, while the thumb of the other hand controlled the upper lid. By this method the edges of the lids came together as the lens escaped between them. Cortical matter has always been removed by gentle pressure and manipulation and not by syringing. Prolonged efforts to remove cortical matter seem not only unwise but unnecessary for if the pupil is immediately fully dilated and kept so adhesions are rare and absorption of the lens matter is usually rapid. The cut edges of the iris have always been carefully replaced and the corneal wound escaped. Atropia was instilled and both eyes have been bandaged. While I agree with most operators that the eye should be disturbed as little as possible for some days I have often found that the comfort of the patient was greatly increased by renewing the dressings (without disturbing the eye) on the day after the operation. As most of these patients are old it is important to consider their comfort, which is by no means an unimportant factor in treatment of any surgical case. This also allows the operator to note the appearance of the lids and to detect any signs of infection. The patient has usually been kept in bed for two or three days, sometimes longer when it seemed best, but I have not hesitated to permit those who were nervous from restraint, or otherwise, to assume any position, or to get out of bed, when it added to the comfort of body or mind. The attendant has always been instructed to have the urine passed within two or three hours after the operation and in order to do this or to evacuate the bowels patients were always permitted to get up and in no case to use the bed pan or urinal. In order that a good night's rest might be obtained, especially for those who are nervous or troubled by insomnia, ten or fifteen grains of sulfonal, trional or some similarly acting drug have been given about five o'clock in the afternoon. If given later sleep is not apt to occur until the next day. At the end of the third or fourth day the bandage is removed from the unoperated eye while the other is usually kept protected until a week or more has passed, when tinted glasses may be substituted during the day while the bandage or some protecting covering is replaced at night. The vision is tested after the eye becomes quiet and distant glasses may be worn for a time every day but the reading glasses is not given for six weeks or two months after the operation. Frequent tests during the first six months will often show improved vision as the astigmatism, incident to the operation, disappears when the normal curvature of the cornea returns. Secondary operations for opaque capsule have been performed at any time after all signs of inflammation and irritation have subsided. It should be added that while this is a simple procedure that as much care should be taken as with the principal operation for a number of very careful operators have reported absolute losses after the first had been successful, and it would be difficult to convince the average layman that it was not due to unnecessary and unwise meddling.

While it is undoubtedly an eminently good rule to have every patient most carefully examined before any operation it has not always been possible in the series here reported. An accurate knowledge of the urine and the blood pressure is of exceeding importance and the general temperament of the patient should be studied when possible. A gentle laxative should be given the night before and both the bladder and bowels emptied before the operation. It is also wise when a general anesthetic is not used that a light repast of food should be

taken an hour or more before the time for operating. A thorough examination of the conjunctiva, the lachrymal sac, nasal cavities and mouth is of the utmost importance and when there is the slightest doubt of latent infection the assistance of the bacteriologist should be sought. I am ashamed to admit that two of my failures from suppuration of the cornea were due to latent disease of the tear sac which I should have discovered. When the appearance of the conjunctiva is suspicious, even though no infectious germs have been found, it is safe to instil a few drops of a 25 p. c. solution of argyrol, three times a day for several days, before operating and just before the operation (as practiced by H. D. Bruns) to flood the cul-de-sac with 5 p. c. solution of the same drug.

Two of the traumatic cataracts were produced by myself prior to removing the lenses in a case of high myopia. Both lenses were needled a number of times after which one was extracted while the other was left to be absorbed. Both operations were successful but that in which the lens was left to be absorbed had the better result and in young persons, for whom the operation is usually performed, it would seem to be the safer procedure in spite of the greater number of operations required. For one immature cataract the preliminary capsulotomy advised by Homer Smith was performed. Some difficulty was experienced in removing the lens about eight hours later which was probably due to my lack of experience in performing the operation. The technique followed in this series of cases has been (a) to have the patient in as good physical condition as possible though I have not hesitated to operate upon those who were not in first rate condition where there seemed little chance for improvement, or the preliminary treatment would be too protracted. It has been my experience, and probably of others, that the general health of many persons improves rapidly after the restoration of sight which no preliminary treatment could effect. Diabetes, mild chronic nephritis (indicated by small percentage of albumen constantly in the urine) have not deterred me from operating at times. (b) the surroundings have, when possible, been clean but not a few operations were done in very dirty places and, strange to say,, the results were uniformly good. I have always been most careful to see that the faces, appendages of the eye and the ball itself were scrupulously clean, and where there has been any doubt as to the sterility of the conjunctiva the cul-de-sac has been flooded before and after the operation with a 5 p. c. solution of argyrol. Cocain, in 4 p. c. solution, has invariably been used except in a very few cases where a general anesthetic was necessary. I am in the habit of telling my patients when they will feel pain (when the iridectomy is done) and have found by soothing and encouraging them many nervous and frightened persons become quiet and easy to manage. One mildly insane woman, upon whom I was operating, suddenly grasped my right wrist and uttered piercing screams just as the knife had made the puncture and counter puncture and was still through the cornea. It was an awkward and trying moment as I both feared to hold on or to release the knife. I decided to play a bluff game, as the saying goes, and roughly ordered her to let go my hand or I would cut her eye out. She did and I quickly finished the operation without trouble. Excellent vision was obtained but it is needless to add that I did not urge an operation on the other eye.

Upon several occasions the lens has been suddenly ejected from the eye, along with the vitreous, as soon as the corneal cut was made but in no instance has the eye been lost from this complication.

Among the cases of corneal infection after the operation I have never been successful in controlling the suppuration but once and that was by passing the actual cautery through the incision from end to end. Of course a leucoma resulted but some vision was saved. In such cases no effort should be considered too heroic for no result is a greater damper to one's surgical temperament than a case of panophthalmitis following an extraction when a brilliant result had been anticipated.

In this series I can remember but one case of post-operative delirium but what is, perhaps, of equal interest was a case of anti-operative hallucinations in which the patient continually saw things, such as endless processions of grotesque and hideously shaped figures of men and beasts. The family thought her demented and doubted the advisability of the operation, but after the restoration of vision she had no further trouble. This was probably due to the refracted rays of light, dribbling as it were, through the interstices of the cloudy lenses and by the unusual stimulation of the retina caused the disordered mental sensations.

The number in this series is not large but they represent a considerable part of my earlier experience in these operations and it has seemed that a record of them might be of interest.

THE PRESENTING SYMPTOMS IN 300 CONSECUTIVE CASES OF SYPHILIS.

By R. H. Lafferty, M. D., and
S. R. Thompson, M. D.
From the Crowell Urological Clinic, Charlotte, N. C.

WHETHER a man be a surgeon, ophthalmologist, determatologist, internist, neurologist, gastroenterologist or general practitioner the subject of Syphilis is of paramount interest and importance. Of all the diseases of which man is heir, it takes the most diverse and varied forms and it is by no means uncommon. It has been estimated that between 10 and 20 per cent of the adult male population has the disease. It is claimed that there are 200,000 syphilitics in New York City alone. It causes 42 per cent of all miscarriages and 75 per cent of the children of syphilitic parents die in infancy. Those that survive in many cases would be better dead.

We hope, in presenting this paper, to show to some extent the great variety of ways in which it manifests itself and thus to influence the profession to take cognizance of this great plague and to remember that it may have an important bearing on many an obscure case. There was some excuse for the older practitioneers not recognizing the disease since, in many cases, especially in women, its beginning may be obscure. The primary lesion may not be noticed and the secondary may be either slight or thought to be some other malady. Today we can hide behind no such excuse with the Wassermann Reaction at our very hand. We do not pretend to say that this test

Read before the South Carolina Medical Association, Spartanburg, S. C., April 19, 1917.

is absolutely accurate and infallible. Nothing man made is perfect. But in a vast majority of cases it gives us the information we need. We find many modifications of the original technique but believe that the original test is still recognized as the best, with Noguchi's modification giving it a close second. We have tried out the Hetch-Weinberger modification and do not find that it has any advantages over a carefully done Wassermann.

The bichloride test as recently devised has not been accepted as servicable and if done at all is used by only a very few.

The luetin test we have used to a considerable extent and find that it is of value in certain tertiary forms in which the Wassermann is negative. The gold chloride test combined with a careful examination of the spinal fluid is of inestimable value in spinal and cerebral lues.

The microscopical examination for the spirochaeta pallida either by the dark field or by the staining method is of the greatest value altho it is true that in very many of the cases with a primary lesion it is almost impossible to demonstrate the organism since the patient has often treated the sore for several weeks and in many cases it has been cauterized several times either by the doctor or some knowing friend. It is undoubtedly safest "to consider every venereal sore as potentially a chancre"—even if it does not present the distinguishing characteristics and to withhold a definite diagnosis until it has been proven negative by watchful waiting and several Wassermann tests.

In this series we have chosen our last three hundred cases since our records before these are not as complete as we would wish to have them.

The Wassermann Reaction has been done on all the cases and the other tests in many of them and, omitting the primary form, practically all have shown a positive blood or spinal fluid. In a large number of the primary lesions the organism was found. In cases diagnosed clinically with negative Wassermann and when no organism was discovered, the diagnosis was confirmed by the therapeutic test.

The following chart shows in tabulated form the presenting symptoms for which the patient asked relief. In not a few cases there were several prominent symptoms but we have classified the patient under the one of which he complained.

PRIMARY	55
SECONDARY	42
ULCERS	54
Throat	26
Leg	19
Breast	2
Arm	1
Cervix Uteri	1
Neck	1
Nose	1
Toe	1
Finger	1
Clavicle	1
CONDYLOMATA	4
Rectum	2
Vagina	2
MUCOUS PATCH	26
Mouth, Nose, Throat	
GENERAL GLANDULAR	16
GASTRO-INTESTINAL	11
PAIN	22
Head	10
Side and Shoulder	7
Abdomen	1
Arm	1
Leg	2
Hip	1
EYE	7
EAR	2
Deafness	1
Roaring	1

NERVOUS	33
General	16
Paresis	8
Tabes	4
Cerebral	3
Facial	2
GUMMA	16
Testicle	7
Penis	4
Bladder	1
Kidney	1
Humerus	1
Jaw	1
Epididymis	1
MISCELLANEOUS	13
Nephritis	3
Diabetes	2
Liver	2
Heart	2
Anal Fistula	1
Pernicious Anaemia	1
Swollen Face	1
Dizziness	1
Total	300

Of the fifty-five cases with a primary lesion all except three were on the genitalia. There were two on the lip and one, in the case of a doctor, on the finger. It is surprising that we should have a much larger number showing a primary lesion but since quite a large number of them were referred and because few physicians are fitted to do the dark field examination we would expect many of them not to be referred until some further symptoms than the primary sore was evident and this likewise accounts for the rather large number of secondary cases that we have in this series. Under the division marked secondary we have placed only those showing the rash and those with mucous patches, condylomata, etc. under separate headings.

Under the head of ulcer there were fifty-four cases. It is difficult to draw a sharp line of division between mucous patches and ulcers. However, we are calling ulcers lesions in which the necrosis seemed to involve a deeper layer than the mucous membrane. It is rather striking that twenty-six or practically half of these ulcers were located in the throat and that nineteen were found on the leg. The remaining six were sufficiently well distributed to show that no portion of the body is exempt.

There were other cases than these three mentioned that had condylomata but these were the only three that came in complaining of this symptom as the chief trouble.

Altho the mucous patch is a very constant and characteristic lesion of late secondary syphilis, of the seventy-one cases in this series that were secondary only twenty-five came in complaining of the mucous patch and all of these were in the mouth, nose or throat.

By placing a special heading "General Glandular Enlargement" we do not mean that these sixteen were the only cases that showed this condition but these were the ones that came in complaining solely of this. Some of them had only a very slight enlargement of the lymph nodes while in others the enlargement was very marked. It is true that glandular enlargement is found to some extent in practically all cases of lues.

We do not pretent to say with reference to the next two divisions, viz, gastro-intestinal symptoms and pain, as well as certain other conditions, that lues was the only cause, but when the Wassermann was positive and when the symptoms were relieved by Salvarsan and Mercury we feel justified in attributing the trouble to syphilis. The eleven gastro-intestinal cases presented diverse symptoms varying from acute gastritis and coli-

tis to what the patient would call "indigestion" or "stomach trouble."

The twenty-two cases of pain were fairly well distributed over the body and we were able to find no other cause for it than lues, and as specific treatment cleared it up in every case we felt justified in giving lues as the etiology. It is hard to say exactly to what direct cause the pain in these cases is due. It is very striking that practically half of them are located in the head. Some would undoubtedly come under the classification of toxic, others hypertension and in a few cases the pain was so intense that one naturally thought of cerebral gumma. This symptom of headache being present in 3 1-3 per cent of the cases suggests that Lues play an important part in the etiology in more of our chronic headaches.

Seven or a little over 2 per cent. came in with eye symptoms. Iritis and intestitial keratitis are the chief troubles for which those patients were referred. Two cases of keratitis were congenital.

Of the thirty-four nervous cases sixteen are classed as general nervousness. This is, of course, a vague sort of symptom and undoubtedly was in a few instances syphilophobia, others would say "so nervous can't work" or "can't sleep" or some such expression and this would be the only symptom that could be elicited. Two cases came with facial paralysis, three with marked cerebral symptoms, four with tabes and eight with paresis.

Our series shows only sixteen with gumma. If many of the other cases had been investigated more fully or had come to autopsy more gummata would undoubtedly have been found. Probably some of the gastric symptoms were due to gumma and it is very likely that at least one of the liver cases would have shown gumma of this organ.

Under the heading of miscellaneous we find a few interesting cases. Of the three cases of nephritis there is a bare possibility that one of them had the trouble brought on by excessive mercury therapy before coming to us, and in the other two cases the trouble seemed to be purely of leutic origin. We have found but one other case of pernicious anaemia in literature, that had lues given as the cause.

Finally we would like to emphasize what is already well known, viz: the great majority of the presenting symptoms and to call attention to the fact that even in this series some of the very important and often recurring types are absent—for example, the vascular cases. We think these are absent because the subjective symptoms are either vague in themselves or they are referred to other organs—as headcahes, dizziness, etc. In two or three cases aneurism was found. In a good many arteriosclerosis was present, but they were found only upon examination and, of course, were not complained of by the patient.

EXOPTHALMIC GOITRE.

By Sam Orr Black, M. D.
Jefferson, Hospital, Philadelphia, Pa.

BRONCHOCLE of the exopthalmic type is a chronic, less frequently acute, severe systematic intoxication, resulting, many think, from an over-production, with a concomitant excessive liberation of a chemic substance into the liquid tissues of the body from the acini of the thyroid gland. If the intoxication be chemic in nature, and to the contrary no one can positively gainsay, it is one of the few remaining chemical substances (poisonous) for which there is

as yet no known chemical or physiologic antidote.

Perhaps the most interesting feature of Exopthalmic Goitre has to do with its etiology. The thyroid gland, like all the other somatic tissues, is subject to a number of pathologic conditions, and its anatomic and physiologic changes depend upon the nature of the disturbing agent. Goitres constitute one large type of its possible affections, and these themselves are further divisible into several varieties. The etiology of one type may be radically different and totally independent of the causative factor of the other. Thus, for instance, the so-called simple goitre, seen in so many mountainous districts among the various continents of the globe, may result from the contamination of the earth's substance by some micro-organism, or as yet undiscovered mineral element, from the inhalation of impure air, or from the swallowing of cowardly germs which have so carefully secreted themselves among the molecules of the ingested water as to have yet escaped human detection.

The Adenomatous Goitre, whether it be distinctly acinous or acino-fibrous in structure, beginning as it does absolutely without exception in one lobe of the gland and developing slowly or rapidly, remaining benign or becoming malignant, may possibly have as its cause any one of the advanced theories of neoplastic growth.

In like manner, Parry's disease, he being the first to accurately describe Exopthalmic Goitre in 1825 (Osler), must almost of necessity emanate from a still different source, since its pathology and ensuing symtomatology are so essentially different from the above mentioned types. Unfortunately, its true etiology is so shrouded in mystery that all attempts to fathom its cloudiness have left the observer stranded upon a bleak and barren shore, only to revel in the realms of imagination and conjecture. That it may be provoked by a state of severe shock, violent fear, or a moment of profound depression, some have attempted to prove. Emotional disturbances of these characters are far more frequent in the female sex, and as reports show twenty females with Exopthalmic Goitre to one male, some consideration must be given to this suggestion.

Toxins of an unknown nature, arising from within (Thompson, New York) or introduced from without is another theory to which a few still adhere. Infection antedated most frequently by tonsilitis (Mayo) is one of the common causes of Hyperthyroidism. Many of the investigators claim that it is a perversion of some internal secretion or the abnormal interaction of two or more products of the so-called Ductless Glands. That the cause is an over-production of the thyroid secretion itself seems the most plausible, since during the course of the disease the administration of thyroid extract considerably aggravates all the clinical manifestations.

What then is the cause of the Hyper-secretion? The general body metabolism depends in a large measure upon the secretions of the Thyroid gland. Perhaps the amount of this secretion is constantly being regulated, in part at least, by one or more of the internal secretions. This portion of the mechanism of the body being so delicately, yet substantially constructed and controlled, continues certainly in a large percentage of cases to functionate normally. Obviously, a disturbance of one or the other of the component parts of this intricate arrangement might check, increases or alter the character of

the finished product. That abrupt, fulminating emotional explosives might readily damage the machine or tear its parts asunder is indeed feasible especially when one recalls the vast connections and marvelous dominance over the tissues of the human body by fibres arising, and impulses emanating from the so-called vital centers of the human brain.

Graves' disease is in every respect a systemic one, presenting many local manifestations, chiefly through the Gastro-intestinal, nervous, cardio-vascular and opthalmic systems. Exceptionally, it is of the fulminating type, so suddenly, so completely, and yet so horribly is the clinical picture flashed upon the screen of life. One such case occurred in Philadelphia in which the toxemia intensified itself in such lightning-like rapidity that it became incompatible with the woman's life—in the comparatively brief period of three days she died.

However, hyperthyroidism seldom progresses continuously, without interruption, to a fatal termination provided it does not kill in the first few weeks. (Mayo). Far more frequently the disease is essentially chronic in nature, often, however, characterized by acute exacerbations of all the symptoms. Commonly the gland enlarges so very slowly, the exopthalmos increases so insiduously the nervousness and tachycardia are of such mild characters as to totally escape the notice of the patient. These four cardinal features progressively intensify. In time the patient's attention is directed to them. She begins to worry, the psychic stimulus thus produced stimulates the severity of all the symptoms. The eyeball eventually projects beyond its normal anterior boundary, the lids retract, the palpebral fissure is thus enlarged. (Stellwag's sign.) As the eye travels downward, the upper lid lags behind; one or both eyes may be involved, usually the latter, and rarely Exopthalmos is absent. Not infrequently the eyelids tremor. The retinal arteries do not pulsate, the veins may. Retinal arterial pulsation occurs only in Glaucoma and Aortic Regurgitation. (Hansell.) Corneal erosions and ulcerations are predisposed too; blindness in one or both eyes has been seen in Rochester, Minn. Very exceptionally the eye may be dislocated.

The old ideas that Exopthalmos was due to venous congestion behind the eye may be discarded. The late Dr. Landstrom has described a few irregular microscopic fibres running forward in the orbital fascia from behind the eye to the lids. They are supplied by the cervical sympathetic nervous system, and they draw the eyeball forward and the lids backward when irritated (Surgical treatment of Exopthalmos C. H. Mayo.)

The heart's action very early in the process becomes incrtased and may soon be beating 140-160 times per minute. This tachycardia plus the concomitant increase in force may be so violent as to cause visible pulsations not only in the vessels at the base of the neck, but also in the small periphereal arterioles and even in the capillaries themselves. This increased intra-vascular tension may explain the painful cutaneous sensations of which the patients sometimes complain. Undoubtedly it causes the blushing and the free perspiration so frequently seen. Strangely enough, however, Exopthalmic Goitre of long standing impairs the vocal cords but little if any. This is explained by the diminution in the size of the gland as the Goitre ages, due to the contraction of its connective tissues. In ordinary Goitre the gland progressively

enlarges with time, and as a rule, the longer its standing, the more marked will be the changes in phonation.

Muscular tremor constitutes the fourth cardinal feature. To be properly demonstrated the patient should stand erect, extend the arms and forearms forward in pronation and separate the fingers. The phenomenon is seen as an uninterrupted series of vibrations of the hands and digits, the latter moving in a vertical, less frequently transverse, and even more rarely in a circumferential direction. The eyelids show the vertical movemen. The severe diarroehea and marked emaciation, exhibited by some, may in a measure be due to the muscular unrest in the intestinal wall, assisted perhaps by the irritating action of the exciting noxer, if such it be, on Auerbach's and Meissner's plexuses or by similar effect on the Vagus and Splanchnic centeres.

The above is all true of a type Exopthalmic Goitre, but it like all earthly affections, may manifest itself by a varying symptomatology, often most obscure at the beginning. Thus, at the very time when the family physician should correctly interpret the slight dyspnea, early fatigue, scant albuminuria, perhaps noticeable tachycardia or even beginning tremor, he is prone to see only too superficially, and thereby permits the causative factor to continue hurling its attack into the unsuspecting patients. Having primarily damaged the thyroid gland itself, the wrecking agent marches unchallenged and unchecked through the cardiac, renal and hepatic provinces leaving fatty degenerations and other secondary changes of a destructive nature in its wake. Myxedema with all its dreadful syndrome is prone to occur. Months and even years later the patients die as a result of these visceral lesions situated far distant from the point of initial invasion.

I repeat that the opportunity for aborting the disease by therapeutic means is thus far too frequently over looked. The diagnosis rests mainly on the clinical picture. There is no aggultination nor digesting tests, no microscopic or specific chemical findings of moment. Lymphocytosis is frequently noted, but it is present in practically all chronic infections. But in the absence of all these Exopthalmic Goitre should be readily interpreted and even in the moderately advanced cases, acute or chronic, the diagnosis is often made at a glance. On the streets, by the bed-side, at the very threshold of the doctor's office the story is told.

All Parenchymatous enlargements of the thyroid gland warrant a careful study as to carbohydrate metabolism. Only last winter the senior Professor of Surgery at Jefferson showed a case in which he thought the hyperthyroidism was essentially a compensation of pituitary disease. He did not operate. Subsequent treatment bore him out in the diagnosis. Urinalysis assists in determining the carbohydrate tolerance.

The treatment of Exopthalmic Goitre readily divides itself into four headings:

Frist: Very early treatment.

Second: Treatment of an acute attack.

Third: Operative treatment.

Fourth: Post-operative treatment.

If the condition be detected in its incipiency, absolute rest in bed, light diet, thorough elimination, bacillus Lactus Bulgarus (Solis-Cohen), Thymus gland, and moderate doses of neutral quinine hydrobromide (Forshheimer) may prove sufficient to arrest the process. Andrenalin, supplemented by the X-ray and ligation

of the superior Thyroid vessels may be of assistance. Resect a portion of the gland if these agents induce no decided improvement in a few weeks.

An acute attack is to be nursed along until the acute symptoms subside—absolute rest in bed; visitors, papers, and magazines prohibited; ice-bag to the precordium; elevation of the feet; and sodium cacodylate (Murphy) should induce the desired results. However, should the symptoms persist, one is justified in ligating one or more of the thyroid vessels, in injecting boiling water into the gland itself, or in performing a sympathectomy after Jaboulay.

These remedies should check the heart's action and return the patient to a condition more normal, at which point the case becomes an operative one. The gland may be removed by any one of the several methods now in vogue. Sharp knife dissection is of prime importance. Pick up all tissues parallel to the larynx and trachea. (E Crile.) Escape of the glandular secretion into the adjacent tissues should be carefully guarded against. Adjacent nerves and blood-vessels are not to be injured. Maintain as bloodless an operative field as possible. Ether with oxygen, intratracheally given, is the preferable anaesthetic. If secondary changes of an aggravated nature exist in the heart or kidneys, cocaine is to be preferred. Crile's method of anaesthization as described by himself, page 192 in his new book, AnociAssociation, may be tried.

The mortality following these operations is now very low. If operated prior to visceral degenerations, and in the absence of an acute attack, the danger is no more than is an uncomplicated hermiotomy. (Kocher).

The post-operative treatment, Frazier thinks, almost as important as the operation itself. He says the patients should be kept as free from physical and mental strain as their social status will permit. Child-bearing, household cares, club meetings, theatre parties, and the like should be dispensed with for a varying length of time. The diet should be plain and easily digested.

195 North Converse St., Spartanburg, S. C.

DIVERTICULITIS OF THE APPENDIX.

By Julius H. Taylor, M. D., F. A. C. S.
Columbia, S. C.

THE literature on the appendix and its diseases is of such vast extent that one hesitates to bring forward even observations of an interesting and comparatively rare pathological condition involving this organ. However, the large part this little outlaw of the abdomen plays in the work of the surgeon would seem to justify any reference that might tend to throw light on its misdeeds.

The appendix is subject to all the various diseases to which its component anatomical elements are liable in other parts of the body, and we must ever have an eye to these possibilities when opening the abdomen for symptoms in the lower right quadrant.

One of its rarer affections and one had in common with other portions of the intestinal canal is diverticulosis, occurring usually as a multiple condition. Meckel's diverticulum represents the most usual true of congential type met with elsewhere than in the appendix. The classic region for its site is the lower ileum, though in rare instances it may be found high up in the jejunum or duodenum

or far down in the cecum or colon, according to whether the upper or lower limb of the primitive intestinal loop has undergone excessive development.

The false or acquired diverticula may occur also in any part of the intestinal canal, but they have a particular affinity for the sigmoid and cecum, owing to the anatomical arrangement of the large bowel with its longitudinal and circular fibres shortening and throwing it into pouches, thus favoring their formation.

Rarely the appendix shows the presence of diverticula. MacCarty, and McGrath (Surgery, Gynecology and Obstetrics, March 1911) reporting seventeen cases in five thousand specimens. In their cases the lesion was usually a multiple one. The diverticula were grossly visible but varied greatly in size, the largest being about one-half centimeter in diameter and projecting beyond the surface about an equal distance. They consisted of evaginations of the submucosa, muscularis mucosa, and mucosa, through an opening in the muscular coats.

The condition was found in a wide range of ages, the eldest sixty-four years and the youngest eighteen years. Fifty per cent of the cases occurred in acute appendicitis. The average duration of the symptoms was seven years and the average age at operation was thirty-four years. Two complained of pain in the epigastrium and one in the right hypochondrium. They claim that the condition does not seem to bring about symptoms so early in life as the appendix ordinarily does but a higher percentage occurs in acute appendicitis.

Mr. L. S. F. was referred to us on April 2, 1916, by Dr. P. V. Mikell of Columbia, S. C., with a diagnosis of acute appendicitis. With a history of no previous attacks of abdominal pain, he noticed about midday of March 21, 1916, a dull ache in the right lower side, which progressively grew worse. The following night there was some nausea with vomiting. The pain remained constant up to the time of entering the hospital, varying somewhat however in intensity. There was no history of a chill, or rising temperature. On admission his temperature and pulse were both normal. His leucocytes the day previous had been 15,300 with 69 per cent polynuclears. He was a well developed man, twenty-one years of age with a negative physical examination, except for marked muscle rigidity, pain and tenderness over the appendix region. Through the usual intermuscular incision a large, thick appendix was removed, showing congested varicose veins in the serosa. Small vascular nodules protruded from the surface which on section apparently had a lumen continuous with that of the main tube. The lumen was filled with soft mucosa. Dr. Kenneth M. Lynch, pathologist to the Medical College of South Carolina reported the mucosa generally in a state of acute catarrh with pus containing ulcers here and there. The submucosa was markedly overgrown with young connective tissue and infiltrated diffusely with pus cells. The muscular coats were generally hypertrophied and infiltrated with young connective tissue cells and leucocytes.

The serosa was infiltrated in a similar manner. The blood vessels had unusually thick muscular coats and were engorged with blood. There were numerous petechia throughout the wall.

The nodules protruding from the

surface had a mucosal lumen and apparently were protrusions of mucosa and submucosa through the muscular coat beneath the serosa. Diagnosis—apparently a previous diverticulosis with progressive acute infection.

SOCIETY REPORTS

STATE ASSOCIATION OF GRADUATE NURSES.

The 10th annual convention of the Graduate Nurses Association was held in Spartanburg Wednesday and Thursday, April 11th and 12th, 1917.

The following topics were presented:

A paper written by Miss Fannie F. Clement R. N., Superintendent of Town and County Nursing Service, was read by Miss Virginia Gibbs. Mr. Albert Johnson, Sec. of the Board of Charities and Corrections, read a very excellent paper on "The State care of the feeble minded." Miss Estelle Magill, R. N. read a most instructive paper on the "Administration of Diets in the Metatabolism word at Bellevue Hospital." This paper was read by Miss Forquet.

B. F. Simms, D. D. S., very ably presented the subject of "Oral Hygiene." Much discussion followed this talk.

Miss Frances F. Strickner R. N., read a paper on "Social Service."

G. A. Wheeler, M. D., U. S. Public Health Service, presented the topic of "The Nurse as a Factor in the Prevention of Pellagra."

Miss A. B. Commer, R. N., read a paper "The Graduate Nurse as she Appears in the Public Eye."

Chas. E. Lowe, M. D., of the Spartanburg City Board of Health, presented a paper "Quarantine and the Nurse."

Miss Mary C. McKenna, R. N., Pres. of the S. C. Graduate Nurses Ass., made a most excellent address. She mentioned "We now find ourselves face to face with new problems, we feel the call of our blood for service. The nurses of S. C. stand as one for service for country."

We stand solidly for bettering the conditions of nurses especially as regards education. She calls on the nurses for interest in Red Cross especially for home duties.

At the business session which was called to order Thursday April, 12 at 9:30 A. M., the following officers were elected to serve for the ensuing year:

Pres. Miss Mary C. McKenna, Charleston, S. C.
1st Vice Pres. Miss A. Agnew, Greenville, S. C.
2nd Vice Pres. Miss Marie Zelfelder, Spartanburg, S. C.
Tres. Miss Zadie Gulledge, Columbia, S. C.
Sec. Miss A. B. Gibson, Sumter, S. C.

Owing to the Constitution of S. C., no woman is allowed on the State Board of Medical Examiners. This being the case a motion was made and carried in the House of Delegates, that the S. C. Graduate Nurses' Ass., send their president and a committee of six registered nurses to Columbia at the time the State Board of Medical Examiners meets, this committee to be admitted as an advisory board, and to meet each year with the State Board of Medical Examiners when the nurses come before the Board for examina-

tion and registration. This committee was elected to serve for a term of three years. The following were selected: Miss M. Trenholm, Miss Zadie Gulledge, Miss Julia Irby, Miss A. B. Gibson, Miss L. Brown, and Miss A. B. Commer.

It was moved and carried at this meeting that the initiation fee of the S. C. Graduate Nurses Ass., be raised to $5 and annual dues to $2: this to go into effect 1918.

The meeting was adjourned to meet next spring in Charleston, S. C.

Very respectfully,

A. B. Gibson,
Secty.

SPARTANBURG.

The Spartanburg County Medical Society met for its regular monthly meeting on April 27th. The president, Dr. Edwards presided. The attendance was unusually small. Dr. M. Sullivan of the Public Health Service made a very interesting talk on Vitamins and demonstrated paralysis in a pigeon and a hen both of which had been fed on a diet lacking in intamin.

Routine business in connection with the recent meeting of the South Carolina Medical Association was transacted.

L. Rosa H. Gantt,
Secty.

CLARENDON.

Whereas, a state of war has been formally declared as existing between the United States of America and the Imperial Government of Germany, we the members of the medical profession of Clarendon County South Carolina desire to go on record in the adoption of the following:

Resolved, That we recognize the high patriotic purpose of President Wilson in the course he has pursued in connection with the International complications that have come about unprovoked on the part of our government, and that we have a profound confidence in the integrity and innate ability of the President to push to a successful conclusion the contest to overthrow AUTOCRATIC TYRANNY and to firmly establish the rule of justice and liberty among the people of the earth.

Resolved, further, That to this end we pledge to our country our heartiest support in whatever we may be of service.

DARLINGTON.

The Darlington County Medical Society held its regular quarterly meeting at the home of Dr. Wm. Egleston in Hartsville on Tuesday night April the 10th.

There were present at the meeting nineteen members and two invited guests Dr. S. C. Baker of Sumter and Dr. F. H. McLeod of Florence.

After an elegant supper tendered the Society by Drs. Wm. Egleston and T. E. Howle the meeting was called to order by the President Dr. Egleston.

Dr. J. T. Howell was received as a member from the Richland County Medical Society and Dr. G. W. Parnell was elected as a new member.

Suitable resolutions were adopted on the deaths of Dr. John Lunney of Darlington and Dr. E. T. Barrentine of Society Hill, two of our oldest members as follows:

Whereas, it has pleased the Supreme Architect of the Universe to remove from our midst our friend and colleague, the late Dr. John Lunney; and

Whereas, the relations long held by our deceased colleague with the members of this Society render it proper

that we should place on record our appreciation of his services as a member and his merits as a physician: Therefore be it

Resolved, By the Darlington County Medical Society that in the death of Dr. John Lunney that this Society loses a brother who was a pioneer surgeon of this community and a physician who was always active and zealous in his work, even to the last when enfeebled by age.

Resolved, That this Society tender its heartfelt sympathy to the family and relatives of our late brother in this their sad affliction.

Resolved, That these resolutions be entered upon our minutes and a copy be sent to the family of our deceased brother.

A. T. Baird, Chairman,
J. C. Lawson,
J. T. Coggeshall,
Committee.

Whereas, we, the members of the Darlington County Medical Society, wish to record our testimony of appreciation in which we held Dr. E. T. Barrentine of Society Hill: Therefore be it resolved:

1st. That in his death we have lost one of our oldest members and one of our most loyal and ethical practitioners.

2nd. Dr. Barrentine in his professional life showed forth the character of a true physician and never considered himself or his comfort in looking after the welfare of his patients, always generously spending himself for the poor and needy.

3rd. That a page in our records be inscribed to his memory and that a copy of these resolutions be sent to his family and to The Journal of The State Medical Association.

Dr. Egleston, Chairman
Dr. Gregg,
Dr. Carrigan,
Committee.

Dr. S. C. Baker, who is a member of the State Committee on Medical Preparedness, then addressed the Society on that subject.

Dr. Egleston asked all members to especially interest themselves in the State Tubercular Sanatorium, laying great stress on the need of a larger institution of its kind where these unfortunates can be cared for and treated at a moderate expense.

On motion the Society adjourned after spending a very pleasant evening.

J. T. Coggeshall, Sec.

BOOK REVIEW

DIAGNOSIS FROM OCULAR SYMPTOMS.—By Matthias Lanckton Doster, M. D., F. A. C. S. Member of the American Ophthalmogical Society; Ophthamic Surgeon to the New Rochelle Hospital; First Lieutenant in the Medical Reserve Corps, United States Army.

OCULAR.—New York Rebman Company 141 West 36th Street.

The Author has given the profession in this work a comprehensive and executive book on Ocular symptons. It would appear that nothing has been overlooked which would be of value to either the specialist or the general practitioner. The volume contains four hundred and ninety pages good print and altogether attractive

NEW AND NONOFFICIAL REMEDIES—1917, containing descriptions of the articles which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association prior to Jan. 1, 1917. Cloth. Price, postpaid, $1. Pp. 412 X xxiv. Chicago: American Association, 1917.

This book lists and describes the non-secret proprietary remedies that have been accepted by the Council on Pharmacy and Chemistry of the A. M. A. It also describes the newer non-proprietary remedies which give promise of some real value that have been accepted by the Council. Each description includes the chief facts physicians desire to know concerning composition, dosage, indications, cautions to be observed, etc. The book also contains general articles which compare the value of the proprietary remedies with the established drugs they are intended to supplant. Every physician who wants to keep abreast of the times should have a copy of this annual.

THE PRACTICAL MEDICINE SERIES.—Composing ten volumes on the year's progress in Medicine and Surgery. Under the General Editorial charge of Charles L. Mix, A. M., M. D. Professor of Physical Diagnosis in the Northwestern University Medical School. Volume 1 Edited by Frank Billings, M. S., M. D. Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago. Assisted by Burrell O. Raulston, A. B., M. D. President Pathologist, Presbyterian Hospital. Series 1917. Chicago The Year Book Publishers 327 S. LaSalle St.

A considerable section of this volume has been devoted to research work investigation as carried out by various authorities. The article on Trench Fever is interesting. The whole volume of general medicine has been revised and brought up to date.

CANCER ITS CAUSE AND TREATMENT.—By L. Duncan Bulkley, A. M., M. D. Senior Physician to the New York Skin and Cancer Hospital, etc. Volume Two, New York Paul B. Hoeber 1917.

The author of this volume presents a different view point as to the causes of cancer than the commonly accepted ideas. He stresses the diatetic life of the patient as prevental influencing the development of cancer. He feels sure that treated alone by apetical lines cancer is frequently improved and possibly cured.

POTTER'S COMPEND OF MATERIA MEDICA THERAPEUTICS AND PRESCRIPTION WRITING.—With especial reference to the Physiological Action of Drugs. Based on the Ninth Revision of The U. S. Pharmacopoeia. Includnig also many unofficial remedies. By A. D. Bush, B. S., M. D. Professor of Physiology and Pharmacology Medical Department, University of Southern California. Eighth Edition, Revised. Philadelphia, P. Blackiston's Son & Co. 1012 Walnut Street. Price $1.25 Net.

Potters Compends have been standard books for many years. This volume has been thoroughly revised and brought into conformity with the Ninth Revision of the United States Pharmacopoeia. Some new articles and paragraphs on important drugs have been inserted.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1916.—Cloth, price postpaid, 50c. Pp. 87. Chicago: American Medical Association, 1917.

This volume contains the reports of the Council which were adopted and authorized for publication during 1916. It includes reports of the Council previously published in The Journal of the American Medical Association and also reports which, because of their highly technical character or of their lesser importance, were not published in The Journal.

In this Volume the Council sets forth the reasons for the rejection of the articles which were examined and found ineligible for New and Nonofficial Remedies. It also explains why certain preparations included

in previous volumes are not contained in the latest (1917) edition of New and Nonofficial Remedies. Physicians who wish to be informed in regard to the status of proprietary and unofficial remedies should have the volumes of the Council Reports, in addition to New and Nonofficial Remedies.

THE SURGICAL CLINICS.—Of Chicago April, 1917. Volume I—Number 2 with 99 Illustrations. Published Bi-monthly. W. B. Saunders Company Phila.

The Contributors to this volume include Beck, Andrews, Bevan, Eisendrath, Ochsner, Harris and others.

Surgery of the Colon by Bevan is very interesting, being a conversation resume of our knowledge of the subject. This volume shows excellent editorial supervision. We confidently look forward to a larger sphere of usefulness for this practical method of teaching Surgery.

MEDICAL STATE BOARD QUESTIONS AND ANSWERS.—By R. Max Goepp, M. D., Professor of Clinical Medicine at the Philadelphia Polyclinic; Assistant Professor of Clinical Medicine Jefferson Medical College. Fourth Edition Thoroughly Revised. Octavo volume of 724 pages. Philadelphia and London; W. B. Saunders Company, 1917 Cloth, $4.25 net.

The Revised Edition of this work appears at an opportune time. Never before have so many Medical Examinations been in prospect, not only before State Boards but before various Boards leading into the Government Services. We commend the book to all candidates.

TRAUMATIC SURGERY.—By John J. Moorehead, M. D., F. A. C. S. Adjunct Professors of Surgery in the New York Post-Graduate School and Hospital. Octavo volume of 760 pages with 522 original illustrations. Philadelphia and London: W. B. Saunders Company, 1917. Cloth $6.50 net. Half Morocco $8.00 net.

We heartily agree with the author when he intimates that he who does Traumatic Surgery well renders a greater service to humanity that in removing a simple interval appendix or becomes expert in Elective Surgery. In other words almost every doctor is called upon to respond to the call of Traumatic Surgery. This volume details in a clear and most interesting manner exactly how to give the patient the very best service. We cannot know too much about Fractures and in this feature alone the book is well worth buying.

DISEASES OF THE GENITO-URINARY ORGANS AND THE KIDNEYS.—By Robert H. Greene, M. D., Professor of Genito-Urinary Surgery at the Fordham University, New York: and Harlow Brooks, M. D., Professor of Clinical

VICTOR

—by the President of the Victor Electric Corporation:

The ancient custom, that the purchaser must look out for himself lest the goods he buys are not as represented, is not the best spirit in today's American merchandising.

It is the desire of this new corporation to give concrete expression to the best thoughts and ideals of American merchandising by maintaining the highest possible standards of quality in product and in service to its customers.

The first rule written for the guidance of the Publicity Department reads as follows:

"All advertisements shall be absolutely truthful, both as to statements of facts and suggested ideas implied by copy."

This corporation is not posing as an ideal; but wishes to be understood as *striving* for ideals. The goods and the service are believed to be the best of today. There is being put into them more than mere expenditure of money—enthusiasm and loyalty to ideals. There is being wrought into the goods that which insures to the buyer articles even better than they are represented to be—that which evidences a sincerity of purpose.

C. F. Samms

Medicine, University and Bellevue Hospital Medical College. Fourth Edition Thoroughly Revised. Octavo of 666 pages, 301 illustrations. Philadelphia and London W. B. Saunders Company, 1917. Cloth. $5.50 net; Half Morocco, $7.00 net.

Urology has taken an advanced position in recent years as a specialty. The book before us represents much that is progressive and scientific along these lines. The effort has been to combine the view points of the Physician and Surgeon. Thus the operative feature does not overshadow the purely medical. Indeed it is impossible really to define the line of cleavage. Therefore the work should be in the library of the general practitioner especially.

DISEASES OF THE STOMACH, INTESTINES AND PANCREAS.—By Robert Coleman Kemp, M. D., Professor of Gastro-intestinal Diseases at the Fordham University Medical School. Third edition, revised and enlarged. Octavo of 1096 pages, with 438 illustrations. Philadelphia and London: W. B. Saunders Company, 1917. Cloth. $7.00 net; Half Morocco, $8.50 net.

In view of the value of the x-rays as an aid to diagnosis in the gastrointestinal tract a special section has been devoted in this new edition to the radiography of gastric ulcer, gastric cancer, duodenal ulcer and gall-bladder disease. The illustrations are very numerous and highly creditable.

The entire book has been revised in the light of the rapid progress especially in the domain of diagnosis.

BIOLOGIC THERAPY IN THE WAR.

War, with its immense numbers of diseased and wounded men, affords opportunity to determine the efficacy of various scientific procedures. The present, the greatest war the world has ever known, is serving as a crucible in which many biologic products are bing tested. When peace returns and all of the data from the various combatant countries become available, we should know which products, if any, may be removed from the experimental list and placed among the agents of established value. According to McCoy, whose discussion of this subject appears in this issue, there there are five agents—vaccine virus, diphtheria anitoxin, tetanus antitoxin, antimeningococcus serum, and antityphoid vaccine—which may be regarded as indispensable in connection with conditions which prevail when large bodies of men are brought together. In addition to the agents mentioned by McCoy, that now may be regarded as necessary, there are some which at present give enough promise of value to make their use worth considering. In this country, fortunately, we are better situated than are any of the European nations, so far as facilities for producing biologic supplies are concerned. The firms manufacturing this class of medicaments can, if need be, meet the demands of our own army and civilian population, as well as those of our allies. The essential nature of the products makes their manufacture in large quantities comparatively simple. With the good sanitary conditions that we may reasonably expect to prevail in our concentration camps, the need for various agents not thoroughly tried out, such as antidysentery serum, antipneumococcus serum, and vaccines against dysentery, cholera and epidemic meningitis, should not be extensive with the possible exception of the meningococcus vaccine. Fortunately biologic products grow in a manner not applicable to munitions or, in fact, any other indispensable material of modern warfare. The supervision of biologic products by the United States Public Health Service safeguards the interests of the manufacturer and of the consumer—Journal American Medical Association, May 12, 1917.

THE STATUS OF ENROLLMENT OF MEDICAL OFFICERS.

An old proverb says not to count one's chickens before they are hatched. This principle should apply when discussing the status of recruiting for the Medical Departments of the Army and Navy. It is well to realize that simply enrolling one's name on a list or making a verbal statement to the effect that one is willing to serve with this or that unit, or unofficial organization or committee, does not qualify one to be counted as an officer of the Medical Reserve Corps. To be so counted, one must be enrolled—that is, commissioned—in the Medical Reserve Corps. To thus enroll, it is necessary first to fill out the regular application blank, such as appeared in The Journal two weeks ago; second, to have it certified to before a notary public; third, to send the application to the nearest examining board; and fourth, to pass the examination. The results then are forwarded to Washington, where the final decision is made as to whether or not the applicant is accepted. If the applicant is accepted, he receives his commission and with it the oath of allegiance, which he must sign, swear to and return to Washington. Only then can he be regarded as a member of the Medical Reserve Corps or of the Medical Corps of the Army. The time has come to face facts, to know exactly where we stand, and then only shall we know what remains to be done.—Journal American Medical Association, May 12, 1917.



Dr. Brawner's Sanitarium

Atlanta, Ga.

For the treatment of Nervous and Mental Diseases, with Separate Department for Drug and Alcoholic Addictions.

Sanitarium located on the Marietta Trolley line 10 miles from Atlanta, near a beautiful suburb, Smyrna, Ga. Grounds comprise 80 acres

References: The medical profession of Atlanta.

Address: Dr. Jas. N. Brawner, 701-2 Grant Bldg., Atlanta, Ga.

Dr. Tyler's Private Hospital
For Surgical Patients

TELEPHONE 738 711 *E. NORTH ST.*

GREENVILLE, S. C.

Broadoaks Sanatorium

MORGANTON, N. C.

A private Hospital for the treatment of Nervous and Mental Diseases, Inebriety and Drug Habits. A home for selected Chronic Cases

ISAAC M. TAYLOR, M. D., Supt. and Resident Physician.

If you think of taking a

Post Graduate Course

in New York doctor, The Journal has something interesting to offer.

The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, $2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.
J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.
WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital, Boston, Mass.

OBSTETRICS AND GYNECOLOGY.
ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY
M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.
G. T. TYLER, M. D., Greenville, S. C.
R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.
J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.
E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

FOOD, BEVERAGES AND MILK PRODUCTS IN THE DIETARY.

The supply of sanitary food and milk products is a problem which is given scant attention in the usual medical training, and is a subject on which the general practitioner is usually not well informed.

He should be. "How to keep well," and the right use of foods for this purpose; the foods necessary to rebuild depleted conditions; those required for postoperative treatment, for nursing mothers, and for babies, are vital questions for every practicing physician.

Physicians should also be informed as to methods and foods which will help to solve the problem of "The High Cost of Living."

For example, it is known that oleomargarine is cheaper than butter; but it is generally known that oleomargarine and butter are essentially of equal digestibility? That some of the best oleomargarine contains 89 per cent of fat and 9 per cent of water, while butter has less fat—85 per cent; and more water—11 per cent? Oleomargarine is made in large quantities, under sanitary conditions and government inspection, from selected oleo oils and butter fats. It is colored with butter color, or, if sold uncolored, is 10 cents less per pound. Oleomargarine remains firm at a higher temperature than butter, which is an item in its favor in warm climates and where ice is expensive. All these considerations should induce physicians to study the merits of oleomargarine as a food product.

Physicians should also be familiar with

The Relative Food Values

Of wheat, corn, oats, barley and other breakfast foods; with rice, macaroni, and even bread. It is known that protein is the essential constituent of all meats, eggs, fish and milk; that protein is found in vegetable foods. It is known also that the carbohydrates, sugars and starches, are found in the great staple products, such as potatoes, beans, corn, etc. But what are the proportions? Which foods are best adapted to particular conditions? Does the baby need protein or carbohydrates? What is known about the merits and uses of baking powders, gelatine, grape juice, malted foods, malted milks, condensed milks and the dozens of other well known products that are advertised for the dietary?

It is with a view of bringing the subject of

Food and Milk Products

To the attention of readers that this article is published. Particular attention is called to such products as are advertised in this issue. Many of these announcements give specific information as to the nature of the products: tell how they are manufactured; give the protein and carbohydrate content; suggest conditions in which they are indicated, etc. They contain much valuable information for physicians.

THE SELECTIVE DRAFT SHOULD BE APPLIED TO THE MEDICAL PROFESSION.

A few years ago the idea of conscription of our citizens into military service would have been accorded scant approval in this country, the majority of our people holding to the view that the proper minded man would volunteer their services in case of an emergency and that conscription would be necessary only for "slackers." The inadequacy of volunteer systems in the past had left us largely with their lessons unlearned. But the experience of the foreign countries engaged in the present war, especially that of England, demonstrating the hopeless confusion and disruption of civil affairs and the inefficiency of the military service which results from an indiscriminate volunteer system, prepared this country, as nothing else than bitter national experience along the same lines could have done, for a ready reception of the principle of the selective draft. Essentially, this principle relieves the individual of the difficult responsibility of deciding as to whether he is most needed in civil or military life, and places such responsibility where it should properly be, in the hands of the government which is to be served both at home and abroad.

Our present selective draft bill recognizes this state of affairs, and the government declares its intention of seeing that needful farmers, mechanics, railroad men, financiers, and artizans of all kinds are left at home, and that the more dispensable men are called upon for active participation in the war. This idea has met with a remarkable degree of approval on the part of the American public.

Emotional, sentimentality and romantic concepts have no place in this war. America is not entering upon this struggle with an overweening enthusiasm, but with a grim determination and a sincerity of purpose which is born of a consciousness that they are fighting for the right. This quiet intensity of purpose on the part of our average citizenship receives a pleasing support in the realization that the government is going to direct

their endeavors into the channels of maximum efficiency.

Doubtless through inadvertence in legislation a relatively small but supremely important group of our citizens has been virtually left out of the draft. This group is embodied in the medical profession. It is peculiarly unfortunate that these men should have been denied the mental satisfaction of an effective inclusion in the draft bill. The decision of a physician as to whether his duty lies at home or in the army or navy is a momentous one, affecting intimately his own intimately his own interests, the interests of the armed forces, and the interests of his community. It is a decision that no man should be asked to make for himself, but the government should frankly assume this responsibility, being guided in its action by carefully organized means of advice.

This matter is of supreme importance throughout the country, but naturally of less moment in large, well-organized medical centers than in smaller communities. In the former, the absence of an individual is readily substituted; while in the latter, one man, or a few men, may be the main-stay of an important hospital or may be the principal guardians of the health of a considerable section.

The following figures substantiate the statement that the selective draft does not in effect apply to the medical profession. It has been recently stated that 30,000 military medical men are needed in the present crisis. In 1914 there were approximately 142,332 physicians in the United States. In 1916 they numbered 145,241, or an increase in two years of 2,909, representing a yearly gain of 1,454. Assuming that this yearly rate of increase in the physicians of this country was maintained during the past ten years, and that in 1907 none of our physicians were graduated at an age greater than twenty-one years, the maximum number of medical men in the United States today who are subject to draft is 14,540. As a matter of fact, the average medical student does not graduate earlier than twenty-three years of age. Consequently, making our estimate from 1910 to 1917, we have 10,078 physicians who can be forced into service. This leaves 19,922 medical men who must volunteer their services under the present conditions to fill the government's needs.

It has been stated that the Officer's Reserve Corps offers a means of registration of physicians, and that by joining this organization physicians may receive the advantages which are prayed for here. As a matter of fact, this is not the case. The average medical man rightly feels today that registration in the Officer's Reserve Corps is practically synonymous with enlistment.

Such threats as were recently voiced by Dr. Franklin H. Martin before the American Medical Association in New York, to the effect that if young physicians of conscription age did not hasten to join the Officer's Reserve Corps they might find themselves drafted into the ranks and digging trenches in France, is certainly not conducive to confidence in the integrity of his office, and it is to be hoped that irresponsibility is a just criticism of his remarks.

The proper solution of the problem is the passage of a medical draft bill, requiring the registration of all physicians in the United States between the ages of twenty-three and fifty, and the organization of respon-

sible and carefully chosen selective draft boards throughout the country to determine, in keeping with the spirit of legislation already enacted, which men are essential to the maintenance of proper medical conditions at home and which one may be spared for military duty.

James Heyward Gibbes, M. D.
Columbia, S. C.

READ THE MINUTES.

In this issue we publish the Minutes of the House of Delegates and urge a careful perusal of same. Some of the facts brought out are as follows:

1. The place of meeting will be Aiken next year.
2. The Hospital Committee has been given definite instructions for intensive investigation of our Hospitals.
3. The Educational Committee was enlarged and a member placed in each educational center to mould public sentiment on medical education in our colleges.
4. The officers are urged to visit personally every County Society.
5. Commercial Exhibits at our State meetings are authroized.
6. Councillor reports shall be in writing in future.
7. Weak County Societies are authorized to combine their interests where necessary and feasible.
8. Scientific Committee Elective and Enlarged.
9. Post Graduate Extension Courses commended.
10. The Association promises to take care of the Practice of the Physician who goes to the front.

A. M. A. NOTES.

The meeting of the American Medical Association in New York City June 4 to 8th, in point of attendance surpassed any hitherto held except one. The registration exceeded five thousand. In general while of enormous proportions, the member who gave a little thought to the program undoubtedly received much benefit. To one who wonders around much such a meeting will prove unsatistory. A decided impetus was given to an already arousing spirit of patriotism in the profession by papers on various phases of the war in many sections and at the grand patriotic rally on Wednesday night. The president's address by Dr. C. H. Mayo dealt largely with war problems. He spoke in no uncertain terms of the inertness of Alcohol as a therapeutic measure. The House of Delegates did likewise. The policy of retrenchment in Association Expenses was evident. The great Journal which has been such a phenomenal success costs one third more now to publish than formerly. Dr. Arthur Dean Bevaw who has done so much to elevate Medical Education was elected President and Chicago the next place of meeting. Some thirty South Carolina doctors attended this meeting and we noted an increasing number from the smaller cities, towns and rural districts of our State. We believe the physicians of the smaller communities could not combine a trip of business and pleasure to greater personal advantage and ultimately to the good of their clientele.

THE PHYSICIAN'S PRACTICE WHO GOES TO FRONT.

The House of Delegates of the South Carolina Meidcal Association, Spartanburg, S. C., April 17th, 1917, adopted the resolutions below.

PUNISHING PATRIOTISM.

A Suggested Method of Meeting This Evil.

Undoubtedly in the past civilian doctors who have been patriotic and who have served their country in the army or navy, have been in a measure punished for such service by finding their practice dissipated and gone on their return home. The knowledge of this has naturally acted in preventing many a physician entering the Officer's Reserve Corps of U. S. at this time.

To meet this situation the committee proposes to have offered the following resolutions at the Annual Meeting of the State Societies:

(1) "Resolved that the South Carolina Medical Association recognizes the patriotism of those members of the medical profession resident in South Carolina, who volunteer for the service of the United States Government, and in appreciation of this we recommend that should these members of the profession be called into active service, the doctors who attend their patients should turn over one-third of the fees collected from such patients to the physicians in active service to his family."

(2) "Resolved that the Secretary of the Society shall have prepared letter-blanks according to the form attached, to a number sufficient to supply those physicians who are called into active service, with a sufficient number, so that they can send a filled-out form letter to each patient or physician referring a patient, a carbon copy going to the doctor who has agreed to look after the physicians practice, and a second carbon copy to be sent to the secretary of the State Society.

The Secretary of the State Society is instructed to file the carbon copies received by him, and on notification by a physician that he has terminated his service with the Government and has resumed his practice, the Secretary of the State Society shall then send out to each of the patients of the physician and doctors who have referred patients whose names and addresses he has received in the filed letters, a letter stating that the physician has resumed the practice of medicine, and requesting the patients and the physicians in the name of the Society to recognize the physicians patriotism by summoning him should he be in need of medical attention.

(3) The Secretary of the State Society is further instructed to have printed and sent to each member of the profession resident and licensed in the State the card entitled "Agreement," and on return of such signed card to him, to file it."

This method is the only one which we have been able to devise which can in any way meet the situation that confronts the doctor who is patriotic, and who is penalized for his patriotism by the loss of his practice. By this method the profession at large is "put upon its honor," the patients of the physician are urged to retain his services, and this urging is done, not in the doctor's name but in the name of the profession and as a patriotic duty.

It is further recommended by the committee that after three notices have been sent, at intervals of one month, to each physician, a list of those doctors accepting such agreement shall be published in State Journal or otherwise.

AGREEMENT.

I agree to abide by resolution adopted in relation to fees for attendance on patients of doctors ordered into active service for the Government, and to keep such books as will readily show collections of such fees. I further agree to ask every patient whom I have not previously treated, the name of his usual or last medical attendant and if such doctor is in the active service of his Government, to turn over monthly or quarterly to such physician, or his family if he so directs, one-third of the fees collected by me from this patient.

I further agree that when patients are referred to me by a phsyician or person who has not heretofore referred patients to me, to find out from such physician or person to whom, in the immediate past, they have usually referred their patients requiring the special services I can render, and if such physician is in the active service of his country, to turn over to him one-third of the fee collected from such patient. This paragraph shall likewise apply to consultations.

I further agree not to attend any patients referred to above, for a period of one year following the resumption of active practice by the physician who has been in active service, without his knowledge and consent.

In the remote chance of misunderstandings or disagreements arising under this resolution, I agree to submit the facts to the Board of Censors of the County Society and abide by their decision.

(Signed)

Date.....

After signing please mail this to Secretary of State Society.

Dr. .....

Address.....

PROPOSED FORM LETTER.

(Regular Letter-Head of State Society.)

M.....

Street.....

Post-Office.....

Dear.....:

As a member of the Reserve Corps of the United States Navy, or Army, I have been ordered into active service by the Government, and on that account I am writing to you of this fact, so that, in case of illness, you may summon Dr.....

In my absence Dr.....

of .....,

Telephone No....., has kindly consented to attend my patients, and I can heartily recommend him.

Sincerely,

Resolution adopted by South Carolina Medical Association.

"Resolved that the South Carolina Medical Association recognizes the patriotism of those members of the medical profession resident in South Carolina who volunteer for the service of the United States Government, and in appreciation of this we recommend that should these members of the profession be called into active service, the doctors who shall attend their patients should turn over one-third of the fees collected from such patients to the physician in active service or to his family."

PLEASE PRESENT THIS LETTER TO ANY DOCTOR WHOM YOU MAY CALL TO ATTEND YOU.

Reference Committe Report.

Your Committee begs to report, favorably on the above resolutions and suggests that each item be considered separately by the associa-

tion, one member wishing to offer a minority report on item one.

Realizing the extra work imposed on Secretary we recommend that he be allowed to employ such assistance as is necessary and expenses of same be defrayed by the society.

R. B. Epting, Chrm,
H. L. Shaw,
F. B. Johnson.

MINUTES

MINUTES HOUSE OF DELEGATES, SPARTANBURG, S. C. APRIL 17th, 1917.

The House of Delegates was called to order by the President, Dr. C. B. Earle, of Greenville, who appointed Doctors, C. F. Ross, of Anderson, Lancaster, of Spartanburg, and Dr. Harry Wyman, of Aiken, members of the Credentials Committee, which Committee later reported as follows:

Upon motion, duly seconded and carried, Doctors J. F. Coleman and T. C. Stone were seated as delegates.

THE SECRETARY: We have a delegate from the State Dental Association from Columbia, Dr. Moore.

THE PRESIDENT: Dr. Moore, we extend to you a welcome.

DR. MOORE: It is a great pleasure, I am sure, for me to be with you.

PRESIDENT'S ADDRESS.

House of Delegates of the South Carolina Medical Association.

Gentlemen:

I wish again to thank you for the honor that you have done me in having elected me as your Presiding Officer. This honor has been most gratefully received, and I have attempted, in some measure, to further the interest of this Association in South Carolina.

There are a few recommendations that I have to present to you. Because of the efficiency with which your Secretary and Treasurer has carried on his work, few innovations or changes are necessary.

A matter that each year is becoming of greater importance is that of the program, and we must consider seriously as to whether the good of our meetings would not be increased by curtailing the oftentimes too lengthy program.

I would suggest that the Scientific Committee be made a permanent body, to consist of three members, who shall be elected by the House of Delegates, these to serve one, and two, and three years. These, with the Secretary, to compose the Scientific Committee, and to have complete authority over the program. Probably for our next meeting to devote the first day to Symposiums by speakers to be selected by the Scientific Committee, and the second day to be voluntary papers. This would probably enable us to put in the new order without friction. This plan has been followed in other States and appears to work well.

Another suggestion: With reference to the Standing Committee on Hospitals and Hospital Standardization for South Carolina. At present we have no basis upon which to judge as to whether a Hospital is equipped for, or capable of doing proper work or not. Furthermore: Most of our nurses are trained in

South Carolina Hospitals in some of which the training is good, and some probably nothing at all. I would suggest that the Committee be increased to five, to be elected from this Association, and that it shall be their duty to investigate all Hospitals, making complete reports to this body once a year, and that this Committee shall suggest minimum requirements for all Hospitals that have a Training School for nurses.

Another matter is with reference to an attempt to build up our County Societies. The public are dependent on the general practitioner for their medical and surgical care, and the County Society offers about the only practical post graduate instruction that many of our Physicians have. I think that the Council and the individual Councilors should make a special effort to build up the weaker Societies; or where this is impracticable, to coalesce two adjoining Societies and try to get the local profession in each County to take an active interest in the County organization.

Our State Medical College has considered an Extension Course for County Societies. Lecturers can be furnished, and it would probably be well for the Council to have this matter under advisement, and to devise plans and methods for improving the interest in the local County Societies. Along this same line: I would suggest the advisability of, not only the Councilor in whose district the Medical Society meets, but that the President and Secretary be requested to visit as many of the local Societies as they can during the course of the year. In one of the Northern States it is obligatory on the President, each of the four Vice Presidents, Secretary and Treasurer to visit every County Society in the State during the year. I asked for information as to how this plan worked, and the result seemed to be uniformly good. I would commend this to your careful consideration.

I appointed a Committee on Social Insurance, and would suggest that this Committee be a permanent one. Compulsory Industrial Insurance is being adopted rapidly by all Civilized Nations. Many of our States have passed statutes providing for Insurance, and we should be alert—that unwise and unjust legislation is not adopted in our State.

I wish to thank the Officers and Members for their cordial co-operation during the past year, and to wish for my successor the same generous support. I wish especially to thank Dr. Hines for his able and cordial assistance. To him and his untiring energy, and his unselfish attention to the duties of his position, is due the success of this Association. He deserves all credit for the splendid condition of the South Carolina Medical Association.

THE SECRETARY: Mr. President, as there are certain recommendations in the President's Address, I move you, sir, that a committee of three be appointed to consider these recommendations, and report back to the House of Delegates. Last year a committee was appointed, and somehow or other the report was overlooked, and the Committee did not report back to the House of Delegates.

Motion seconded by Dr. Ross and carried.

THE FOLLOWING COMMITTEE APPOINTED BY THE PRESIDENT:

Dr. Cathcart, of Charleston, Chmn.
Dr. Young, of Anderson.
Dr. J. B. Johnston, of St. George.

REPORT OF THE SECRETARY AND TREASURER.

It is highly gratifying to report the largest membership in the history of the Association, 740, an increase of 55 over 1915. It is a pleasure to report increased activity in the smaller societies, both scientificially and otherwise. Some of the smaller county societies were suspended during the panic times but all have been reinstated. Horry, inactive for several years, has been reorganized and will no doubt do good work in the future. The baby county of McCormick has recently been organized and welcomed into the ranks of the Association. The district meetings have proven a source of inspiration throughout the State. The office equipment of the Secretary has been added to during the year by the purchase of a modern steel fire proof safe for preservation of our invaluable records. With the addition of an up to date system of book keeping already in good working order and a complete card index of the membership, little more is necessary in the way of efficient equipment. In time an adressograph and multigraph should be added though the cost is considerable, perhaps $500.00.

A visit to the surgeon-general's library at Washington in further search of our records disclosed the fact that the Vol. of 1872 is not in our possession. A little search on the part of our membership would probably locate a Vol. for the Association and we believe this would absolutely complete our published records. During the past year, following the initiative of Maryland, North Carolina and one or two other States, a plan has been under consideration whereby Post Graduate Lectures might be brought to the county societies as already outlined in the President's address.

In line with some progressive States we attempted to present both a public health and scientific exhibit at this meeting but unforeseen difficulties arose to prevent execution of the idea in full.

There is an increasing demand for advertising space by commercial houses. We know of no other Association which refuses to grant this and some action by the House of Delegates would seem to be advisable now. Such an arrangement usually pays the expenses of the Association meeting.

The Secretary and especially the President have made efforts to personally visit many county and district societies the past year and our action has appeared to stimulate the work in the places visited.

The past year has been extremely perilous for all journals, magazines and newspapers. Large numbers have been forced to suspend publication inasmuch as almost everything entering into the printing business has advanced in cost from 50 to 100 per cent. A number of the largest and most powerful State Associations have faced either bankruptcy, marked reduction of their journals pages and quality of paper, or a decided increase in society dues per number. As a result of very conservative business methods and fortunate printing contracts, our journal is in no such dilemma. We do not know however what a day may bring forth. A visit to the editors of the British Medical Journal within a week after the great European war was declared, disclosed the fact that fifty per cent of their advertisers had cancelled their contracts. It is not impossible that a similar fate await us and if so our plight would soon become serious as

it has over a large part of the world.

Respectfully submitted,

E. A. Hines, Secretary.

REPORT OF
DR. E. A. HINES, TREASURER
of
SOUTH CAROLINA MEDICAL ASSOCIATION
For the Year ending
Dec. 31st 1916.

RECEIPTS:

Annual Dues, County Medical Societies.	
Anderson	$ 72.00
Aiken	20.00
Abbeville	24.00
Barnwell	24.00
Bamberg	22.00
Beaufort	6.00
Colleton	30.00
Chesterfield	12.00
Cherokee	14.00
Clarendon	14.00
Charleston	132.00
Calhoun	12.00
Columbia	142.00
Chester	44.00
Darlington	34.00
Dorchester	40.00
Dillon	10.00
Edgefield	28.00
Florence	40.00
Fairfield	2.00
Greenwood	40.00
Georgetown	6.00
Greenville	114.00
Hampton	24.00
Kershaw	24.00
Lexington	26.00
Laurens	46.00
Lee	22.00
Lancaster	12.00
Marion	14.00
Marlboro	22.00
Newberry	28.00
Orangeburg	30.00
Oconee	26.00
Pickens	44.00
Saluda	20.00
Spartanburg	100.00
Sumter	44.00
Union	28.00
Williamsburg	20.00
York	50.00
	$ 1,462.00

DISBURSEMENTS:

Overdraft at Bank Jan. 1st	$ 116.10
Sten. Report of State Meeting	145.00
Salaries	450.12
Office Expense	68.13
Traveling Expens of Officials	90.00
Office Furniture	31.93
	$ 901.28
BALANCE: Cash on Deposit with Seneca Bank	$ 560.72

Fund for Prosecution of Illegal Practitioners:

Balance—Cash on Hand Jan. 1st, 1916	$ 130.63
Interest paid by Seneca Bank	6.50
Balance—Cash on Hand Jan. 1st, 1917	$ 137.13

Sims Memorial Fund:

Balance—Cash on Hand Jan. 1st, 1917	$ 50.00

Norwood Memorial Funds:

Balance—Cash on Hand Jan. 1st, 1916	$ 5.00

STATEMENTS OF ASSETS.

Cash on Deposit with Seneca Bank to credit of Association	$ 560.72
Cash on Deposit with Seneca Bank to credit of Special Funds	192.13
Office Furniture and Equipment	84.00
Total	$ 836.85

I hereby certify that the foregoing statements of the South Carolina

Medical Association, showing Receipts and Disbursements (including overdraft at bank Jan. 1st, 1916), Balances to Credit of Special Funds and Statement of Assets, are correct as shown by their books on December 31st, 1916. I have verified the credit of each of the Special Funds and to the credit of the Association, and find same to be correct.

C. C. Dargan,
Public Accountant.

REPORT OF DR. E. A. HINES, EDITOR JOURNAL.

Receipts:	
Balance—Cash on Hand Jan. 1st, 1916	$ 1,158.80
Subscriptions	741.00
Advertising	1,658.01
Interest on Certificate of Deposit	60.00
	$ 3,617.81
Disbursements:	
Salaries	$ 1,730.08
Printing	1,023.72
Office Expense	148.81
Traveling Expense	50.00
Commission on Advertising	27.50
Exchange Subscriptions	11.00
Miscellaneous Expense	20.13
	$ 3,011.24
Balance—Cash on Deposit with Seneca Bank	$ 606.57
	$ 3,617.81

STATEMENT OF ASSETS.

Cash on Deposit with Seneca Bank	$ 606.57
Office Furniture and Equipment	156.00
Certificate of Deposit—Seneca Bank	1,000.00
	$ 1,762.57
Total to December 31st, 1916	$ 560.57
Total	$ 2,222.29

I hereby certify that the foregoing statements of the Receipts (including Cash an Hand Jan. 1st 1916) and Disbursements and Statement of Assets, for the year ending December 31st 1916, are correct as shown by the books of the Journal of the South Carolina Medical Association.

C. C. Dargan,
Public Accountant.

REPORT OF SCIENTIFIC COMMITTEE.

Dr. E. A. Hines, Sec'y.

Mr. President: We tried to do a little better this year than the last. We had personal conferences over this program, and we had been unable to do that for some time, before this year. We feel that we have presented a program that is creditable to us, and I believe you will enjoy it. Dr. Lynch and Dr. Geer did excellent work, and I filled in wherever I could.

DR. LANCASTER: It might be well for this Report o fSecretary and Treasurer, to be referred to a committee of three, to report on the recommendations made therein.

Motion seconded and carried, and the President appointed on the Committee:

Dr. Gambrell, of Abbeville,

Dr. Charles W. Kollock, Charleston, S. C.

Dr. Sarratt, of Union.

REPORT OF EXECUTIVE COMMITTEE STATE BOARD OF HEALTH.

By Dr. Robert Wilson President.

Mr. President:

It is gratifying to report that dur-

ing the past year there has been a marked decrease in the number of deaths occurring in South Carolina, amounting in the first ten months of the year to 2,035. While there has been a moderate increase in the prevalence of scarlet fever and measles, total number of deaths from diphtheria, scarlet fever, cerebro-spinal meningitis, tyhpoid fever, smallpox, whooping cough, tuberculosis and pellagra combined was less than in 1915 by 1,025.

Smallpox occurred in the following counties: Abbeville, Aiken, Bamberg, Charleston, Chester, Clarendon, Colleton, Edgefield, Florence, Georgetown, Greenville, Greenwood, Hampton, Horry, Laurens, Lee, Lexington, Oconee, Orangeburg, Richland, Sumter, and Williamsburg, a total of 236 cases being recorded.

Four hundred and eighty-six cases of scarlet fever were reported from the following conties: Abbeville Aiken, Anderson, Bamberg, Beaufort Charleston, Cherokee, Chester, Chesterfield, Darlington, Dorchester, Edgefield, Florence, Greenville, Greenwood, Kershaw, Lancaster, Laurens, Lexington, Marion, Marlboro, Newberry, Oconee, Orangeburg, Pickens, Richland, Saluda, Spartanburg, Sumter, Union and York. Diphtheria has occurred quite generally over the State, 1,164 cases having been reported scattered through 43 counties. The Health Officer reports that South Carolina has the lowest death rate of any State in the Union. Typhoid fever also shows some reduction but it is still widely prevalent and a tremendous amount of work has been directed against this disease. Mention should be made of the great efforts of the United States Public Health Service in Greenville County. They visited 11,751 homes, inspected 113 churches, 103 schools, 5 post offices, 13 railway stations, 221 rural stores and gave 119 lectures. In their report of October 24th it is stated that they had visited 2,500 of these homes and that over 20 per cent had installed sanitary closets and were protected against typhoid fever.

Last year the Legislature appropriated $3,000 for the support of two units for community work, and a most instructive illustration of what can be accomplished by intensive work is afforded by the results obtained by Dr. Howell in Florence County and Dr. Routh in Laurens County. The State Health Officer reports that when Dr. Howell began work in the district to which he was assigned, of 141 families, 46 had open back unsanitary privies and 95 had no privies at all. When he left, 136 of these families had constructed sanitary privies and so protected themselves against typhoid fever and hookworm. This community unit work by which sanitary instruction is carried directly to the individual can be made of immense value to the county residents, and we trust that we shall have the body of the profession of the State behind us in our efforts to provide for its extension.

One of the most serious problems which confronts us is that of malaria. The Health Officer in his report truly remarks "that the time has come when this State should take advantage of our knowledge of the cause and prevention of malaria and do something to stop the great economic loss to the State from this disease. Probably no disease that we have plays so important a part in preventing the proper growth of a large portion of our State. The death rate from this disease is not as high as many other diseases, but by preventing people who are suffering from the disease, from being able to do their

full share of work its cost in dollars is tremendous.''

The report of the Health Officer shows a remarkable decrease in the number of deaths from pellagra which is worthy of special comment, comparing the figures for ten months of 1915 and 1916 there has been a reduction in the number of deaths from 1,305 to 553.

It is very gratifying to call your attention to the success of the South Carolina Sanatorium for the treatment of tuberculosis. Both the building for men and the new building for women which was opened in August 16, 1916, are full and patients are waiting for admission. The field Secretary, Mrs. Annie J. Rembert, has been most zealous in her work for this institution and its success is due in no small measure to her activities. We earnestly plead for the cooperation of every member of the medical profession of the State to aid us in carrying on this most beneficent and useful work.

It is a subject for congratulation that the successful management of the Bureau of Vital Statistics has brought South Carolina into the registration area of the United States which gives our reports a value which they have never possessed in the past.

Respectfully,
Robert Willson, Jr.
Chairman.

REPORT COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION.

By Dr. Wm. Weston, Chairman.

Mr. President, the only report that this Committee wishes to make is that the State Association instruct the Committee on Public Policy and Legislation to try and have passed at the next session of the Legislature the Medical Inspection Bill. That bill has passed the Legislature on several occasions and has been vetoed by the former Governor. Governor Manning is not only willing to sign that bill, but is most anxious for it to be passed.

REPORT OF COMMITTEE ON STUDY AND PREVENTION OF TUBERCULOSIS.

By Dr. Edgerton.

This Committee wishes to emphasize a few points—that our physicians must realize the importance of—first, an earlier diagnosis of tuberculosis. Through the efforts of the State Board of Health, together with the liberality of our Legislature, certain improvements have been made, or are, at present, undergoing changes in the State tuberculosis institution. Principal among those is the institution of septic tanks and proper screening of the institution, also the installation of a number of beds.

In the County work the Richland Medical Society has instituted a tuberculosis camp which has now grown to a great number of beds, and they are doing a great work in Richland County.

An educational campaign under the supervision of the State Board of Health has progressed over our State, and this Committee wishes to emphasize the fact that the State is hardly able to care for tuberculosis patients further advanced than the incipient stage, and it is very important that our Society, through the State, look eventually to the establishment of a small hospital in every county, for the care of patients afflicted with tuberculosis, in order to allow those people to die at home, but in close enough proximity to

their own people to be with their people in their last days. A tubercular patient wishes to die at home. If he goes and dies at home the value of the tuberculosis institution is lost, and the spread of tuberculosis has not been prevented, which is undoubtedly the aim of the State institution.

In the State of Massachussetts they have passed a law which compels the building in each municipality of a small tuberculosis hospital. The State has undertaken to care for the incipient cases in the State institutions, realizing that they cannot properly care for the far advanced cases, and something along that line is the recommendation of this committee for an ultimate goal.

REPORT OF COUNCILLORS.

Dr. S. C. Baker, Chairman.

MR. PRESIDENT: There appears to have been some misunderstanding, and so the report of the Board of Councillors will have to be submitted later. I have the report of my Councillor district, however, which I will be glad to read.

To The House of Delegates,

South Carolina Medical Association.

Gentlemen:

I beg leave to submit the following report as Councillor for the 7th. Councillor District. The District is made up of the counties of Richland, Sumter, Clarendon, Williamsburg, Georgetown and Lee. I had the pleasure of visiting the Columbia Medical Society in November last and found it in thriving condition. Its members numbered 72 and on the occasion of my visit there were about 30 members present. Several papers were read and a number of Clinical reports made, all of which were thoroughly and most interestingly discussed. All evidencing a live interest in medical matters and up to date acquaintance with recent methods of diagnosis and treatment. The Columbia Society meets monthly.

I visited the Sumter County Medical Association officially at its December meeting. The membership is 28 and their average attendance about 50 per cent. They meet regularly each month and are doing good work.

With the other societies in the district, I found it difficult to arrange a meeting, but on March 27th I visited the Williamsburg County Medical Association at Kingstree. This Society has about 12 members. There were present on the occasion of my visit 5. They are supposed to meet quarterly. There are about 17 physicians in the County scattered over a wide area. Some of them more than 20 miles from the County seat, and these long distances militate considerably against the regular meetings of the Association. They are endeavoring to do satisfactory scientific work and will, I hope, from now on, arrange for Society Meetings more regularly. There has for a long time been trouble in Williamsburg County over the fact that one or more men who have never passed the State Board of Medical Examiners, have been practicing in the County. At the meeting at which I was present, resolutions were adopted and a Committee appointed, looking to the indictment of one of these men and they propose to push the prosecution with expedition and vigor.

The members of the profession in Georgetown County seem to be thoroughly disorganized and I was unable to arrange for a meeting The long distances in this County doubtless have much to do with their

inability to maintain a Medical Society in the County.

The Lee County Medical Society has found it hard also to maintain its organization. There are about 18 physicians in the County with only 6 or 7 enrolled as members of the Association. I was unable to secure a meeting of the Society which I could attend but I visited several of the members and endeavored to arouse interest in the organization. They have elected officers for the present year and I hope are prepared to do better work in the future. There are some changes in our constitution which the Lee County Society desire made.

I visited the Clarendon County Medical Association on April 9th. Here too on account of the long distances to be travelled they have had trouble in getting a meeting of the Society. Their Consititution provides for quarterly meetings. There are about 17 practitioners in the County with a membership of 7 or 8. They re-organized by the election of officers for the ensuing year at the time of my visit and are going to strive for more systematic work during the coming year.

On March 22nd I was able to reorganize the 7th District Medical Association at a meeitng in Sumter at which there were present representatives from all of the Counties of the District except Georgetown. A number of most interesting papers were presented and discussions entered into and all present expressed themselves as most thoroughly satisfied with the results of the meeting. Dr. William Weston, of Columbia was elected President and Dr. Walter Cheyne, of Sumter, was elected Secretary and Treasurer. The Association is to hold its meetings semi-annually and will meet next with the Williamsburg Medical Association in Kingstree, in the latter part of September next. On the whole, while there has been some lagging, the indications are that interest in medical affairs is taking on new life in the 7th District, all of which is respectfully submitted.

S. C. Baker,
Councillor 7th District.

REPORT FROM FIRST DISTRICT.

By Dr. A. E. Baker.

Beaufort, Charleston, Colleton, and Dorchester are well organized, except Berkeley. I have made repeated efforts to get the physicians in this County to organize, and failed, due, in a great measure, to so few physicians in this County. There are only five or six in this large area. I suggested that they connect themselves with the nearest County Medical Society. They seemed to be earnestly desirous of getting together.

Now in regard to illegal practitioners: There are only two in these five counties. Colleton has the two. These physicians, in a measure, have shown good faith, in that they are still going up before the State Board. There has been no friction reported to me between the doctors in these counties.

Charleston and Dorchester Counties are banner counties in scientific work. The meetings are always well attended. Beaufort and Colleton Counties the Medical Societies are weak and poorly attended, but they show a willing spirit.

In regard to our district meetings; we have had two. We have had two for the last two years. We have only been organized two years. One meeting was held in Dorchester County at St. George, and the other

in Charleston. They were well attended, good papers, discussed, and quite a success. (Applause.)

SECOND DISTRICT.

The Secretary: I have a letter from Dr. Matthews, who says on account of illness in his family he will not be able to be present.

COUNCILLOR REPORT.

Second District.

Dr. C. B. Earle, Pres.

Spartanburg, S. C.

Dear Dr: As Councillor of 2nd District I beg to submit the following report. During the year I visited all County Societies except one and found them in good condition. There were held two District meetings during the year; each was well attended.

Yours respectfully,

J. S. Matthews,

Councillor 2nd District.

THIRD DISTRICT.

Dr. T. L. Bailey, Clinton.

Mr. President and Gentlemen: It is with a great deal of pride that I always report my district. We think we are doing good work, and that we are one of the leading districts in the State. We are well organized in each county, bringing over McCormick into our district recently, making five counties we have.

I think our scientific research and development are excellent, too. We have one hospital in Greenville, one in Laurens, and one in Clinton. That represents three hospitals in our district.

Now we have a pretty good membership in each one of these districts. I think all of the eligible material are members. In Laurens County we have three that are not licensed. There has been no complaint coming to me about any illegal work in our district the past year.

We have had one District Medical Association, which was a very pleasant and very successful affair. That was at McCormick when we organized them into our business.

We have, as a usual thing, all the Medical Society's monthly meetings. We have, I think, as a whole, a good working district. I believe that that is all I can say in regard to the report at this time. (Applause.)

FOURTH DISTRICT.

Dr. R. R. Berry of Union.

Of a total of 186 regular physicians in the 4th District, 143 are members of the County Societies, leaving 45 who have not affiliated with us. I do not know how these figure compare with previous years in this district or with other districts, but it does seem to me that the number remaining out of the fold is larger than it should be. I am unable, however, to suggest a remedy for this condition. In Union, the members have made faithful efforts to persuade them to join with us, and the same I think is true throughout the district.

The average attendance, for the district, at the county meetings is a little more than 42 per cent. While this is not as high as it should be, yet considering the frequent and imperative duties of a professional nature conflicting with the hours of meetings, this is not so discreditable.

In Spartanburg, in addition to the County Medical Society, about 15 or 20 of the local physicians have formed a medical club which meets weekly and from reports are doing exceptionally good work.

I have not visited Pickens or Ander-

son, but from what I have been able to learn from their Secretares and other sources of information they are having good meetings while harmony and good fellowship prevail. Anderson meets every other week, Union every week, Greenville, Oconee, Spartanburg and Pickens, once a month.

There were two especially pleasant and profitable meetings held in the district during the year. One of them at Chick Springs under the auspicies of the Greenville Society to which the entire membership of the district was invited and asked to take part in their program. The members with their guests were served with an elaborate and highly enjoyable dinner at this meeting.

The other meeting referred to was the regular district meeting held in Greenville in September. On this occasion a fine program had been arranged and was carried out in an excellent manner. The hospitality of Greenville was attested by the elegant dinner served to the members present.

Spartanburg has been successful in landing the next meeting of the Tri-State Association.

No illegal practitioners have been reported during the year. Considerable improvements and enlargements of hospital facilities have marked the year, while a considerable number of our members in an effort to improve themselves and keep abreast of the times have taken post-graduate courses.

Summed up, I think interest is largely on the increase throughout the district and as a natural consequence, greater efficiency marks the membership of the 4th district.

Respectfully submitted,

R. R. Berry.

I have also a resolution given to me this morning that I wish to read.

DR. COWARD: I rise to a point of order. It should be referred to the Councillors.

THE PRESIDENT: If that is under the heading of "New Business." If it is part of your report it will be in order.

DR. BERRY: It was just handed to me this morning. I think I can make it part of my report. Shall I proceed?

THE PRESIDENT: If it is part of your report.

Gentlemen, you have heard the resolution. It will be referred to the Board of Councillors, without discussion.

DR. GIBBES: Mr. Chairman, if I am in order, this petition is made for discussion, as I understand.

THE PRESIDENT: That will be under the head of report of Councillors.

DR. GIBBES: I wish to say this situation represented by the petition which has been read is one called to my attention by some of the men charged with unprofessional and unethical conduct. They feel considerable injustice has been done them and they wish a complete investigation and exoneration, if possible, at the hands of the profession of the State.

THE PRESIDENT: Dr. Gibbes, if you are discussing that petition, you are out of order. The Constitution says that must be referred to the Councillors without discussion.

DR. COWARD: We are receiving reports, and when each report is read I am going to move that they be discussed.

SIXTH DISTRICT.

The Secretary: I have a telegram from Dr. Lynch, stating he is unable to be present, but his district is in good order.

EIGHTH DISTRICT.

Dr. TIMMERMAN: The Eighth District is working harmoniously. It is my privilege to visit the various counties, there being only four in that district, and each one has a live Association, and there is more interest apparent than has been manifested heretofore.

As many of you know, the district which I represent has no cities, with the exception of Aiken, and the meetings are not held monthly or weekly, as some are, but they usually meet quarterly. Of course occasionally something prevents that. There are only four counties in that: Edgefield, Aiken, Saluda, and Lexington.

Saluda County has nine members and two doctors who are not; Edgefield has 14 members and four physicians who are not; Aiken 22 members 10 who are not; Lexington 18 members and four who are not.

We have a live District Association which meets semi-annually. We have been honored by visitors from among our State officers, which we appreciated, and are glad to report that we are so nearly rid of illegal practitioners. A short time ago Lexington County had seven. In the district there is now only one. He is a pretty good fellow, and, as some one has said, he goes before the board regularly.

(Applause.)

FIFTH DISTRICT.

DR. M. J. WALKER: Mr. President, the Fifth District is organized as well as it is possible to organize it, I think. We have a live district, and next year we are going to Lancaster, without an invitation, and have our district meeting, and see if we cannot do something.

(Applause.)

DR. KOLLOCK: Mr. President, is it in order to make a motion about the reports that have been read?

THE PRESIDENT: Yes, sir.

DR. KOLLOCK: Without meaning to reflect upon any of the councillors, (because it has not been required heretofore), I would move that in the future all concillors' reports be made in writing. We are to-day minus several councillors' reports, because they have not come. If these reports were made in writing they would be before us, even from the men who have not been able to come.

Motion carried

DR. GIBBES: I wish now to move, Mr. President, that the Board of Councillors take up the petition and resolutions which were ready by Dr. Berry and report back to the house of delegates at a meeting to be held at nine o'clock to-night.

Motion seconded.

DR. TIMMERMAN: Why nine?

DR. GIBBES: To give ample time for investigation before that time. If it can be properly investigated before that hour it will be perfectly satisfactory to me.

THE PRESIDENT: The motion of Dr. Gibbes is that the petition be considered by the counsel and reported back at nine o'clock.

DR. BAKER: I would suggest that it be reported before nine, if possible.

THE PRESIDENT: Have you any suggestion as to the time?

DR. S. C. BAKER: I have not, sir. We are ready to report as soon as possible.

DR. LANCASTER: I move to amend that by saying to report back as soon as possible. I think there is a smoker on hand for nine o'clock.

DR. COWARD: I would move to amend that, that we meet to consider that at the call of the Council.

DR. GIBBES: That meets with my approval, if it is heard at this meeting and not deferred for a year.

THE PRESIDENT: It is moved and seconded that this report be considered by the council, and that they report back to us as soon as possible.

Motion seconded and carried.

REPORT OF DELEGATE TO A. M. A.

.. Read by Dr. Hines.

Report of E. A. Hines, Delegate to the American Medical Association. As your representative I attended the meeting of the American Medical Association at Detroit,Mich., June 12 to 16, 1916, and had the honor to be appointed a member of the committee on consitution and by laws. This committee was of more than ordinary importance owing to the fact that many changes were proposed and adopted in the conduct of the meeting of the A. M. A. Among them was the provision for a speaker of the House of Delegates who will be elected on account of special ability as a parliamentarian. Dr. Hubert Work, of Colorado, was the speaker elected. Again the House of Delegates will meet Monday and Tuesday and practically complete its business before the scientific assembly convenes which it will do Tuesday evening. A new section was established on Gastro enterology and Proctology and the section on Hospitals abandoned for lack of interest.

President Vander Veer, of Albany, N. Y., stressed the necessity for preparedness in the event of war and his address is much more significant now than when uttered nearly a year ago, and its wisdom unquestioned. He referred also to the recent appointment of a state school inspector in N. Y., and that 90 per cent of the school children were defective and no scheme of preparedness would succeed which did not begin with the health of the children. The most exhaustive report perhaps ever compiled in any country on health insurance was presented by Dr. Alexander Lambert of New York. Committees in each state were urged to study the question. As a result of expensive law suits the Treasurer reported a slight loss over the previous year. In round numbers the A. M. A. has assets of half a million dollars, the membership is 43,181. The scientific exhibits were of extraordinary interest. A gold medal was awarded Edward C. Rosenow of Rochester, Minn., on elective localization of organisms.

The special feature of the exhibits was that they were demonstrated by the authors in most instances. One special feature of the Detroit meeting was a great public health mass meeting and held under the auspices of A. M. A. and a magnificent public health parade was had. Dr. C. H. Mayo was elected President, and New York City selected as place of meeting June 4-9, the date 1917.

REPORT OF COMMITTEE ON NECROLOGY.

Read by Dr. G. P. Neal, Chairman, Spartanburg, S. C.

(Will Publish later.—Ed.)

DR. COWARD: Mr. Chairman, I cannot allow that report to pass without adding one word about my teacher and personal friend, Dr. John L. Dawson. Dr. Hines, in his Journal, has already published a beautiful tribute submitted by Dr. Wilson. I wish to add my word, I don't think I could speak long about Dr. Dawson, and therefore I simply wish it re-

garded as laying a tribute to his memory.

DR. LANCASTER: Mr. President, I wish to add my word as a tribute to Dr. Dawson. He was a schoolmate of mine. I have known him ever since, and South Carolina has produced no men that were his equal and none that were his superior.

REPORT OF NORWOOD MEMORIAL COMMITTEE.

Spartanburg, S. C., Apr. 17, 1917.

The Chairman and Members,

House of Delegates S. C. M. A.

The Committee on Norwood Memorial begs to submit this report.

Memorial monument is now completed and photograph of same is herewith attached.

Through some error the resolution passed at meeting of House of Delegates in Charleston last year was not recorded. The Committee will therefore have to be financially responsible for the amount of account.

The Committee requests the following:

1. That the Committee be continued.

2. That the former resolution be again passed—viz.: That County Societies be assessed 25c. per member, excepting those already recorded as subscribing—for the securing of necessary funds for Norwood Memorial.

Respectfully,

F. A. Coward, Chairman.

DR. CATHCART: I move that the report be adopted.

Seconded by several and carried.

REPORT OF COMMITTEE ON HEALTH INSURANCE.

DR. A. E. BOOZER: Mr. President the people have in the past year been looking into the matter, but as yet have no recommendation to make. The question of social insurance is is a very important one, we realize, but we do not feel that we are just in a position yet to make a recommendation for our State. That is about all we have to say about it.

REPORT OF COMMITTEE ON EFFICIENCY AND STANDARDIZATION OF HOSPITALS.

DR. HINES: Mr. President, I have nothing to report on that.

DR. BURDELL: Mr. President, suppose we pass that over for Dr. Wilson to report on this afternoon.

Dr. ROSS: Mr. President, I suggest we go as far as we can with the program before us.

DR. HARRY WYMAN: Mr. President, I had some new business and was in hopes that the State Board of Medical Examiners could have a meeting before presenting this. We could not have that, so I am presenting this without their authorization.

That is in reference to the advance graduation of the senior students.

I have another from the Surgeon-general of the United States Navy, Dr. W. C. Grayson. I have reply to that from Dr. Wilson.

According to the statute we cannot run the Medical College all the year, but it requires four years of instruction of 26 weeks each, so that this would have to be met somehow, and the Board of Medical Examiners would like some expression from you as to what steps we shall take. Possibly we can have our law amended, but it is hard to say how to go about it.

THE PRESIDENT: What is your recommendation as Chairman of the State Board of Examiners?

DR. WYMAN: My recommendation is that the House go on record in the way of advising us what to do. The Board is going to have a meeting

as soon as the lunch hour comes, and then we can come back and report what to do. In the meantime we would like to have some advice to act upon at that meeting. I would like for the House to express itself on this matter.

THE PRESIDENT: You have heard the request, gentlemen. Will the House express itself?

DR. GAMBRELL: It would seem well for this to come up this afternoon, when Dr. Wilson brings in his report.

DR. BOOZER: As a member of the State Board of Medical Examiners, I would like to hear an expression of opinion concerning the continuous running of the college in Charleston. Of course that is directly in opposition to the statute as written. Now an emergency has arisen and it seems advisable, if it is the opinion of persons in authority, that the college continue in extraordinary session in order that the junior students may be graduated, in order to serve the country as quickly as possible.

Feeling as I do now, I would be strongly in favor of voting for that, although it is directly contrary to the statute law. I would be glad to hear an expression from the House of Delegates as to their opinion.

DR. COWARD: Mr. Chairman, if I am not mistaken, the rule of the Medical Examiners about numbering the papers is not a part of the Medical Practice Act. We cannot waive the Practice Act legally, of course, but I cannot see why we cannot adopt the rule that a man who had been through the Navy that we should add to the fact such and such members who had been examined by name, and not by number, and of course the consequent disposition of the papers interests them not at all, any more.

DR. EDGERTON: I understand that eleven of these men have been graduated and are going into the Navy, and that a majority of the remaining twelve are going in.

If the institution were run in the extraordinary session, would the Federal Government profit by its running? Would the Junior class go into the Federal service? In other words, would the extraordinary session of the college increase the Federal force? Are the students going in when they are graduated, or are they going to use that as a means of private practice?

DR. CATHCART: At the time this request came in from the Secretary of the Navy, I suggested that we go on in continuous session and graduate the present junior class by next January, and a request was sent in by the senior and junior classes that this be done, so that they could offer their services.

There are less than fifty Class-A medical colleges in the country at the present time! The classes have been reduced, and the country wants good men. You have got to furnish good men or you will have the poor men springing up over the country.

DR. WYMAN: We want to know whether or not they would maintain their full corps and the regular instruction throughout the year? In other words, will your faculty agree with the Grade-A College?

DR. CATHCART: We went on record the other night as continuing that. The Surgeon-General of the army has asked the dean to give him the names of the faculty, so that they will not be drawn for service, even if they are in the reserve corps, but will continue teaching.

DR. FRONTISS: I understand that

this places us on record as to what we think about this matter, and if it is in order I would suggest that the House of Delegates approve some scheme whereby these juniors can go on with their courses in study, and the next session of the Legislature may legalize this action, if necessary; but so far as the approval of the House of Delegates is desired, I move that we approve of the continued session and the early graduation of the juniors.

DR. WYMAN: Is it possible to incorporate the sophs into that?

DR. CATHCART: Yes. I do not understand, exactly, Dr. Wilson's ideas about the matter. We feel that this will only effect the present sophomores and juniors, but the Government has asked a continuous session of all classes. Of course if that war were to continue three or four years it would effect the freshman classes some, I would suggest that we endorse the continuous session, so long as the present emergency continues.

DR. FRONTISS: I move that the House of Delegates place itself on record as approving a continuous session of the South Carolina Medical College, in order that the medical students in the junior and sophomore classes may continue their studies and hasten their graduation, as requested by Secretary of the Navy, Josephus Daniels, and with the hope that some arrangement may be made to overcome any legal barriers. This arrangement to be continued only so long as the present emergency continues.

Motion seconded and carried.

REPORT OF COMMITTEE ON PREVENTION OF VENEREAL DISEASES.

(Report Published later.—Ed.)

DR. COWARD: I understand that the motion is on the five resolutions?

THE PRESIDENT: Yes, sir.

DR. COWARD: I would suggest that they be taken up one at a time and discussed.

(Resolution 1 and 2 read)

DR. KIBLER: I would like to know what the Doctor considers a clean bill of health.

DR. WYMAN: That will have to be worked out by a committee. We know the general idea of what a clean bill of health is. It is not necessary to make an exhaustive examination of every female, but the general details can be worked out. We just want to let the public know in general that a great many marriages do take place which should be delayed for a time, at least, if not altogether.

(Sections 3, 4 and 5 read.)

DR. BARRON: Mr. Chairman, I do not know how this bill is going to be worded. It will have to have quite a good deal of wording in it, not to create an unpleasant situation. In the third there, if he means the system by which they run the larger hospitals of the North which have a free clinic, we endorse that.

The fifth, the abolishment of the free houses of prostitution, I will not endorse that. I think that would make a very bad matter a great deal worse. I think the experience of those cities who have tried that has been very sad. I have not investigated very far. I have just talked to others and have watched it in some few places where it has been tried, and it would take a good deal more conviction to make me think we should abolish houses of prostitu-

tion. I think we need moral education to create a little more the barrier against prostitution by those who are not in houses of prostitution. The houses of prostitution are preferable, to my mind, to a woman who has a good husband, or no husband, and is living in that way. Her influence is very damnable, and I think in this way the abolition of houses of prostitution will be a great mistake.

DR. EDGERTON: To legislate out houses of prostitution would be doing a very wonderful thing, but since it is impossible, houses of prostitution are a great deal better than houses of prostitution located everywhere, which, to my mind, is certainly the case in a great many cases where they have not been legislated out; and the control of houses of prostitution will have a far more reaching effect than the legislating out of the houses of prostitution. The compelling of those people to do the things they should do, in order to be properly regulated, will have a farther reaching effect. I recognize that by coming in contact with those conditions and having the absolute refusal of those people to co-operate at all in any way in putting themselves in better condition.

DR. ROSS: I think these resolutions are very good, theoretically, but very poor practice. I think there are some good things in the resolutions, and a good deal of bad. My work does not come at all from the houses of prostitution, we haven't any in our section of the State, and yet we have a few venereal diseases occasionally, and I do not think the putting of these houses out of business is going to hurt the venereal practice any. I think perhaps it will help it.

DR. COWARD: I am going to move the adoption of those resolutions, because I think we are going to resolve ourselves into a legislature.

I travel a great deal and I have been in Atlanta and the other large cities where the regulated and recognized districts have been abolished, and I have yet to find men who think they have solved the problem. I am free to say, with the exception of Columbia, Dr. Ross, (if he will pardon the use of his name), sends in more cases of Wasserman than any other practitioner in the State. We have had them up time and time again, and the men who vote against them are the men who have been there the night before.

I am surprised to hear the statement that most of the hotels in Columbia are now places of vice. I know some are; but the people who go there do not live in Columbia! We are not laying down these laws.

I am going to vote to adopt the report, although I do not agree with all he says.

Education is the only thing that is going to get us uplift. That is all. I don't know how to regulate it.

DR. STRIBLING: We have had this up before every House of Delegates for a good many years, and if it is in order I move that this committee on venereal diseases be abolished. I think, Mr. President, it is a question of moral education. We have no power to legislate it. I come from up in the mountain country where we have good morals, and we hardly see a dozen cases af venereal diseases a year, and that is among the negroes who are not educated; and now I move that the committee be abolished.

THE PRESIDENT: The point of order has been raised that Dr. Stribling's motion is out of order.

DR. STRINBLING: If the motion is in order I move that this committee be discharged.

THE PRESIDENT: Your motion is in order.

DR. BURDELL: How about Dr. Coward's motion?

THE PRESIDENT: Dr. Strinbling's motion is out of order.

DR. BURDELL: I do object to voting for the abolishing of these houses of prostitution, because I think they are here to stay. Dr. Coward says we are not making laws, but we are putting the South Carolina Medical Association as influencing the South Carolina Legislature, and I do not think we should do that.

DR. WYMAN: Mr. President, I did not expect very much in a discussion on this, because it takes a good deal of thought and reading to familiarize oneself with all the different points. We are very well aware of all these points. This particular law is in force in some of the Western States, and is working very satisfactorily. This bill is working very satisfactorily to all concerned, and Dr. George Walker and many others have worked at this from every point of view possible, and have succeeded in having it introduced in Maryland, and it is in very good working order now. This other law is going to take care of, to a certain extent, the clandestine type. We realize that that is the worst type; but in consideration of that argument we have agreed that the best solution is to abolish it.

DR. BURDELL: I move to amend Dr. Coward's resolution by striking out the fifth resolution.

THE PRESIDENT: The motion is to accept the first four recommendations.

Motions seconded and carried.

REPORT OF COMMITTEE ON EFFICIENCY AND STANDARDIZATION OF HOSPITALS.

DR. ROBERT WILSON: Mr. President, I regret very much that that Committee has not been able to do any work this year.

THE SECRETARY: By invitation Dr. Wm. Weston, of Columbia, will hold a pediatric clinic in this hall tomorrow morning at nine o'clock.

DR. ROSS: I move that recess be taken until three o'clock. Motion carried.

AFTERNOON SESSION.

THE PRESIDENT: The House will please come to order. If any delegates have come in since the morning session they will present their credentials.

Upon motion of Dr. Coward the roll was called.

THE PRESIDENT: Chapter 5, Sec. 2, says that the election of officers shall be the first thing in order after the reading of minutes on the first day of the general session. The nominations for President are in order.

DR. ROSS: I am going to nominate a gentleman whose name has been up before the organization before. I want to nominate the President of this body, and I hope that this Association will make it unanimous, Dr. F. H. McLeod, of Florence.

DR. COWARD: I take pleasure in seconding that nomination, in addition to the second from Anderson, for when a second comes from a man so far as Anderson, for a man from Florence, I think we should vote for him. When a man can do something for the entire State, I think he should be elected.

DR. CATHCART: I move that the

rules be suspended and that the nominations be closed and that the President cast the unanimous vote of this Association for Dr. McLeod as President. (Applause.)

Motion carried.

THE PRESIDENT: Gentlemen, it gives me a great deal of pleasure to cast this vote unanimously in favor of Dr. McLeod for President.

Now, First Vice-President. Remember, only those can be nominated who have been in attendance at one of the last two meetings.

DR. KOLLOCK: Mr. President, I nominate Dr. Kenneth M. Lynch for First Vice-President.

Seconded by Dr. Ross, and upon his motion nominations closed and the unanimous vote of the Association cast by the Secretary for Dr. Lynch for First Vice-President.

SECOND VICE-PRESIDENT.

DR. COWARD: Gentlemen, I am going to nominate one of our prominent suffragists, who has helped to put South Carolina on the map, Dr. L. Rosa H. Gantt.

DR ROSS: I move that the rules be suspended and that Dr. Gantt be elected by unanimous vote of the Association.

Motion carried.

THIRD VICE-PRESIDENT.

DR. CATHCART: I nominate Dr. P. G. Ellisor of Newberry. Nomination seconded, the rules suspended, and Dr. Ellisor elected Third Vice-President.

SECRETARY AND TREASURER.

DR. LANCASTER: Mr. President, I beg to place in nomination Dr. Hines for Secretary and Treasurer. He has been the whole sum and substance of the South Carolina Society except at the annual meetings. I am not attempting to eulogize him. I move that the nominations be closed and that Dr. Gantt cast the unanimous vote of the Association for Dr. Hines.

DR. GANTT: I cast the unanimous vote for Dr. Hines.

DR. HINES: Mr. President, I think this is the greatest honor South Carolina has ever paid me, to have this distinguished woman cast the vote of the Association for me.

COUNCILORS.

THE PRESIDENT. The time expires this year for councilors for the first, third, seventh and fifth districts.

DR. BURDELL: Mr. President, I nominate Dr. A. E. Baker to succeed himself in the first district.

Seconded by Dr. Ross, nominations closed, and the unainmous ballot of the Association cast for Dr. Baker to succeed himself.

DR. TURNER: I nominate Dr. Bailey of the third district to succeed himself.

Nomination seconded by Dr. Ross and upon his motions nominations closed and the unanimous ballot cast for Dr. Bailey.

DR. BURDELL: Mr. President, I take pleasure in nominating Dr. Walker of the fifth district to succeed himself. I think he has made an excellent councilor.

Seconded, and Dr. Walker unanimously elected.

DR. ROSS: Mr. President, I nominate Dr. Baker to succeed himself.

Nominations closed and unanimous ballot cast for Dr. Baker.

THE PRESIDENT: The next is the place of meeting.

DR. STONE: Mr. President, I am instructed by the Aiken County Medical Society to invite the Society to meet next year at Aiken. Our hotel

facilities are quite ample to take care of the crowd, and I trust you will see fit ot accept our invitation.

DR. COWARD: We have met in several places in the past few years. The papers this morning carry the news of a historic meeting fifteen years ago in this city. It has been the custom to go to the larger cities. The question is, are we doing the most good in going to the larger places? I don't think so. There is only one question of entertainment. But for that question it would be better to go out and meet in the woods and meet the men who are "up against it." Those are the men we want. Those are the men who have to combate illegal practitioners. I move that we meet next year in Aiken, South Carolina.

DR. FRONTISS: I second the nomination, and move that nominations be closed and that the unanimous vote of the Association be cast for the selection of Aiken as the next place of meeting. Motion carried.

THE PRESIDENT: We will be very glad, Dr. Stone, to go down with you next year.

DR. STONE: We will be very glad to have you, sir.

THE SECRETARY: Mr. President, I have an invitation here but my attention was diverted by another matter and I feel it would be an injustice to you not to present it to you.

Campobello, S. C., April 16th, 1917.

To the State Medical Association of South Carolina,

Gentlemen:

We are very anxious to have your Association meet at the Campobello Mineral Springs next year. The hotel is located about one-half a mile from Campobello. We have a large hall 35x100 feet on the 3rd floor of the new part of hotel just finished, very suitable for holding a convention.

If we have the pleasure of having you with us next year we will make every effort to make it as pleasant for you as possible.

We will make you a special price of $1.00 per day. Trusting to have the pleasure of having you with us, we are,

Yours very truly,
Campobello Mineral Springs Co.,
Per J. F. Harris.

MEDICAL EXAMINERS.

Report of the State Board of Medical Examiners of South Carolina for the Year 1916.

The term of office of Drs. Harry H. Wyman, H. L. Shaw, A. M. Brailsford and A. Earle Boozer expired with the April, 1916, meeting of the South Carolina Medical Association. The House of Delegates proceeded with the nomination of members to fill these vacancies on the Board, with the result that each member was re-elected to succeed himself. All nominations were then confirmed by the Association and the members appointed and commissioned by the Governor to serve their respective terms of office.

The Board met at the State House at 3 p. m., Jun 12, 1916, and November 13, 1916, and registered applicants to practice medicine and for nurses' registration.

At 9 p. m. the Board met at the Hotel Jerome with the following members present: Drs. Harry H. Wyman, J. J. Watson, John Lyon, H. L. Shaw, E. W. Pressly, A. Moultrie Bailsford, J. T. Taylor and A. Earle Boozer. The annual election of officers was held, and the following were elected: President, Dr. Harry H. Wyman; Secretary-Treasurer, Dr. A. Earle Boozer.

The examination questions pro-

posed by the members were considered and approved, and the following order of examination was adopted: Tuesday, 9-12, Dr. Pressly; 3-6, Dr. Lyon; 8-11, Dr. Watson. Wednesday, 9-12, Dr. Shaw; 3-6, Dr. Taylor; 8-11, Dr. Wyman. Thursday, 9-12, Dr. Bailsford; 12-3, Dr. Boozer.

In accordance with a resolution adopted by the House of Delegates at the meeting in April, 1916, the nurses were given practical examinations in November, 1916, as follows: Dietetics, Dr. John Lyons, at Columbia Hospital; Practical and Surgical Nursing, Drs. Wyman and Boozer, at Baptist Hospital.

Applicants for Examinations.

Doctors....June, 62; Nov. 28	90
Nurses.....June, 41; Nov. 25	66
Total.....	156

Doctors

Whites males	79
Colored males	7
Whites females	3
Colored females	1
Total	90

Nurses

White	66
Colored	0
Total	66
Grand total	156

The Board met at Columbia, S. C., in July and December, 1916, to tabulate the grades made by the applicants at the June and November examinations, with the following results:

White, passed 51; colored, passed, 3; total	54
White, failed, 31; colored, failed, 5; total	36
Total	90

Nurses

White, passed, 57; colored, passed, 0; total	57
White, failed, 9; colored, failed, 0; total	9
Total	66
Grand total	156

We further report that the term of office of Drs. J. T. Taylor, Adams Run, First Congressional District; John Lyon, Greenwood, Third Congressional District; E. W. Pressly, Clover, Fifth Congressional District, and J. J. Watson, Columbia, Seventh Congressional District, expries with this meeting.

A. Earle Boozer, M. D.
Secretary.

DR. KOLLOCK: Mr. President, I nominate Dr. Taylor to succeed himself as Examiner from the first district.

Nomination seconded and unanimous ballot cast for Dr. Taylor.

DR. GAMBRELL: I nominate Dr. John Lyon of Greenville, to succeed himself as councilor of the Third District.

Nomination seconded and Dr. Lyon unanimously elected.

DR. LANCASTER: I move that Dr. Pressley of Clover be nominated to succeed himself as Examiner from the Fifth District.

Nominations closed and unanimous ballot cast for Dr. Lancaster.

DR. COWARD: I nominate Dr. J. J. Watson as Examiner from the Seventh District.

Nominations closed and Dr. Watson unanimously re-elected.

DR. HARRY WYMAN: I wish to read these recommendations from the Board of Medical Examiners.

DR. LANCASTER: I move that these recommendations be accepted

as the sentiment of this Association

Motion carried.

DR. WYMAN: Mr. President, it seems to me another motion is now in order: That we instruct our Legislative Commitee to see that the Legislature protects us by law, to have some enactment to cover this case. I make a move to that effect, that our Legislative Committee be instructed to make a law to that effect.

DR. COWARD: They have had trouble enough in Congress to get them to do even what the President wanted, and what the majority wanted, and possibly what we all wanted. I do not see any reason to carry this to the Legislature. I think the Legislative Committee has troubles enough with what they have to handle. I believe that we can handle that, and that the faculty can safely be trusted to co-operate with the Board of Medical Examiners. If you go in there and get turned down you are ruined. Let's put ourselves on record and leave it to the Board of Examiners and the faculty to handle.

DR. LANCASTER: I think it is up to the national government to take care of its request, so far as citizenship is concerned. I think it would be a mistake to request a law at all. It may be we do not need any. I think if the United States Government needs a certain thing Congress will make a law to carry that out.

DR. ROBERT WILSON: The first part of that resolution is hardly necessary. The young men graduated in advance will have been in college 26 weeks; consequently they would be allowed, without any further question, to go before the State Examining Board, if they desire to do so For the rest we shall probably continue until next year, provided the war does not come to a much speedier termination. Whether it is necessary to take the matter up now, is a matter for the House of Delegates to provide. Will not have had 26 weeks, and perhaps something will have to be done about that.

DR. LANCASTER: Suppose you start your session and go on to January, what is the matter with that?

DR. WILSON: The applicant must have had four separate courses in four separate years. That is the way it is written upon the statute books of South Carolina.

DR. WYMAN: In reply to Dr. Wilson that it was necessary to have that first part of the clause twenty-six weeks, of course it doesn't apply to South Carolina College, but it applies to all classes of colleges, and there may be other colleges, and suppose it has to go on to next year; that would bring in the South Carolina College; so we want it to apply to more than any one year.

THE PRESIDENT: All in favor of Dr. Wyman's motion that the Legislative Committee be instructed to attempt to have a statute passed by the Legislature will please say "aye." Opposed "no." All in favor of the motion will please arise for a count. The number is 14.

All opposed to this motion will please rise. The count is 16. The matter is lost.

DR. BOOZER: Mr. President, as Secretary of the Board I would like to call the attention of the House of Delegates to a proposition here in which we are interested, to a certain extent. At the last session of the Legislature the act was passed creating a Board of Optometrists, whose duty would be to carry out the purposes.

That is the point I wish to bring

to the attention of the Association.

THE PRESIDENT: I am very glad you did so. I was requested several weeks ago by the optician members of that board to have that nomination come from this body. Gov. Manning says it will be perfectly all right with him to have that nomination come from us, so I am going to ask Dr. Wyman to nominate some one ta serve on that board.

DR. WYMAN: I am going to nominate Dr. Whaley. He helped with the bill.

DR. BRAILSFORD: I nominate Dr. Parker of Charleston.

DR. KOLLOCK: Isn't there something in the act that no member of the Board shall be in the faculty of the Medical College?

THE PRESIDENT: It does not exclude him.

DR. E. F. PARKER: I ask the gentleman who nominated me if he will not withdraw that nomination. I do not think it is right for a man on the faculty to be on that Board.

(Name withdrawn.)

Upon motion, nominations closed, and Dr. Whaley unanimously elected.

DR. CATHCART: Mr. President, in view of the fact that the United States of America is in a state of war with Germany, and we have been informed that there will be numerous calls upon the medical profession to come to the colors, I beg to offer the following resolution:

RESOLVED, That the South Carolina State Medical Convention recommend that the various County Societies take such steps as to provide that the practices of its various members who are called to the colors be attended to during their absence, and returned to them on completion of their services to the country.

I am informed that this is the condition that the country is in, and a very serious one, that if the army is recruited up to two million men it will require between thirty and forty thousand medical men. That is going to be quite a drain on the medical men, and those who go to the colors should be protected by those who remain at home.

DR. WYMAN: I recommend that motion.

DR. COWARD: I wish to call attention to the letter as to the Federalization of the State Board of Health. I will offer a resolution, if it must be done right now, or I will be glad to write one.

THE PRESIDENT: You can introduce it under the head of "Miscellaneous Business."

DR. COWARD: I will say that, whereas certain communications by Ernest Kelley have been submitted to the Executive Committee of the State Board of Health, and by them referred to the House of Delegates for action, that the House of Delegates hereby resolves, first: That they approve of the suggestions set forth in said communication;

Secondly, That power be given to the Executive Committee of the State Board of Health to take full action committing the State Board of Health to co-operation as desired in said letters, with the United States Public Health Service, said agreement to terminate at the end of the present war.

Seconded by Dr. Wyman.

THE PRESIDENT: Is there any discussion on Dr. Coward's motion? If not, all in favor of this motion will make it known by saying "Aye." Opposed, "No." The "Ayes" have it.

MISCELLANEOUS BUSINESS.

Asheville, N. C., Via Greenville, S. S., April 18, 1917.

Dr. C. B. Earle,

Care Cleveland Hotel, Spartanburg, S. C.

Our motion Dr. Way Society unaniomously voted to send fraternal greetings to South Carolina Medical Association. Please adjourn early and spend tomorrow with us at Ashevillt.

Chas. O. H. Laughinghouse,
President N. C. Med. Society.

Washington, D. C., 6:24 P. M. April 17, 1917.

Dr. Edgar A. Hines,
Secty. of the S. C. Medical Assn.
Spartanburg, S. C.

Have sent letter of instruction from Council of National Defense please see to it that the matter is presented and especially urge every man to enroll in the Medical Officers Reserve Corps.

Franklin Martin,
Council of National Defense.

Birmingham, Ala., April 17th, 1917.
South Carolina State Medical Assn.
Spartanburg, S. C.

Greetings, hope you are having great meeting and everybody having good time in the name of our great Southern Medical Association, I extend to your every member a most cordial invitation to attend our Memphis meeting in November come with large delegation and help us make it a glorious success.

Seale Harris.

DR. GAMBRELL: Mr. President, your committee appointed this morning to report on the Secretary and Treasurer's report, wish to report: As to the advertising space, we recommend that the proper authorities grant such authority at the annual meetings.

THE PRESIDENT: Who would you term the proper authorities:

DR. GAMBRELL: The Secretary and Treasurer.

THE PRESIDENT: You have heard the recommendations from the committee on the Secretary's report; what shall we do with it?

DR. WYMAN: We might make an amendment: That the Secretary request the Committee on Arrangements to allot the space for the commercial advertising.

DR. KOLLOCK: I think that might be referred to the local entertainment committee, with the approval of the Secretary. He is apt to know more about these firms, because it is in his province to look into them, and if he sent them to the local committee with the statement of recommendation, it would be probably a better plan.

I move that so much of that report —the first portion of it, to be acted upon now, be approved, with that understanding—that the Secretary shall make the recommendation.

THE PRESIDENT: Your suggestion is that the words be changed and referred to the local committee with the approval of the Secretary?

DR. KOLLOCK: I have no objection.

THE PRESIDENT, (after stating motion and having it voted on) The "ayes" have it, and that part of it that relates to the exhibition of pharmaceutical and other appliances is adopted.

The second part is a notice in regard to the Lee County Medical Society, as that is a constitutional amendment that they have to lay over for one year, for that part that relates to the Councilors necessitates a change in the Constitution; so if there is no objection that will go over until next year.

DR. WYMAN: I move that the Committee's report go on record.

THE PRESIDENT: The minority report is in favor of it.

All in favor of this motion say "Aye," opposed, "No." The motion is carried.

DR. CATHCART: I would like to report to the Committee in regard to the President's Address. The Committee has met and considered carefully the suggestions made by the President in his address this morning and recommend as follows:

"In regard to the first suggestion that the Scientific Committee be made a permanent body, to consist of three members who shall be selected by the House of Delegates, these to serve one, two and three years; these, with the Secretary, to compose the Scientific Committee, and to have complete authority over the program.

Your committee recommends that this suggestion be adopted. We feel it is in line with progress, and that it will also prove to be to the best interests of the scientific work of this body.

The second suggestion in regard to the standing committee on hospitals and hospital standardization for South Carolina, we recommend that this also be adopted by this Association. This is also in line of progress, we have been informed. Most of us know that these investigations in regard to hospitals will take place as was done in regard to the various medical schools of the country. This is going to be taken up by the various national bodies, and it would be a good thing to have a standing committee that could report to this body each year on hospital facilities and standards. We suggest that that be adopted.

The third recommendation in regard to having smaller counties combine, two or more, we recommend that this be adopted.

The suggestion was made that the district societies would take care of these smaller societies, but when we realize that the district societies meet only once a year, that the men do not get together often enough, we feel if those small counties will organize a local society there, their interest in medical affairs will be stimulated.

The fourth suggestion in regard to having the President or Secretary visit each county society at least once a year, your committee recommends as follows:

That the President, or Vice-Presidents or Secretary be required to visit at least once a year each county society. This will not make a hardship on any one of your officers, and will keep the various members of the county societies in close touch with this body.

The fifth suggestion in regard to the extension courses for the county societies, we recommend that the council consider the advisability of having lectures for the various county societies, either from members of the faculty of the State Medical College, or other sources, to assist in carrying on extension courses.

This is signed by

Dr. Johnston, St. George,
Dr. J. R. Young,
Dr. R. S. Cathcart, Charm.

(Continued in next Issue.)

NOTICE

Any physician having an inclination for Sanitarium work in the line of Nervous Diseases and Habit cases should write DR. L. G. CORBETT, Greenville, S. C., who wishes to retire from this field.

UNIVERSITY OF GEORGIA

MEDICAL DEPARTMENT

AUGUSTA, GEORGIA.

The eighty-sixth session begins September 12, 1917; closes May 29, 1918.

ENTRANCE REQUIREMENTS

Candidates for entrance this session must have completed one full year of work in an approved college in addition to four years of high school. The college work must have included Physics, Chemistry, Biology, and French or German. Beginning in 1918 two years of college work will be required.

INSTRUCTION

The course of instruction occupies four years. The first two years are devoted to the fundamental sciences, and the third and fourth to practical clinic instruction in medicine and surgery. All the organized medical and surgical charities of the city of Augusta and Richmond County, including the hospitals, are under the entire control of the Board of Trustees of the University. This arrangement affords a large number and variety of patients which are used in the clinical teaching. Especial emphasis is laid upon practical work both in the laboratory and clinical departments.

TUITION.

The charge for tuition is $150.00 a year except for residents of the State of Georgia, to whom tuition is free.

For further information and catalogue address,

The Medical Department, University of Georgia,
Augusta, Georgia.



Dr. Brawner's Sanitarium

Atlanta, Ga.

For the treatment of Nervous and Mental Diseases, with Separate Department for Drug and Alcoholic Addictions.

Sanitarium located on the Marietta Trolley line 10 miles from Atlanta, near a beautiful suburb, Smyrna, Ga. Grounds comprise 80 acres

References: The medical profession of Atlanta.

Address: Dr. Jas. N. Brawner, 701-2 Grant Bldg., Atlanta, Ga.

Peace Printing Company

Greenville, S. C.

Printers **Blank Book Makers** **Binders**

LET US BIND YOU JOURNALS. **Professional Stationery a Specialty.**

The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, $2.00. **EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.**

ASSOCIATE EDITORS.

INTERNAL MEDICINE.
J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.
WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital, Boston, Mass.

OBSTETRICS AND GYNECOLOGY.
ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY
M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.
G. T. TYLER, M. D., Greenville, S. C.
R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.
J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.
E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

SOUTH CAROLINA DOCTORS READY FOR SERVICE.

Quite a number of the members of the State Association are ready for the call to service. We note among them the following:

Dr. F. D. Rogers,
Dr. J. R. Boling,
Dr. B. H. Baggott,
Dr. M. H. Wyman,
Dr. R. B. Durham,
Dr. Isadore Schayer,
Dr. D. W. Register,
Dr. J. A. Hayne,
Dr. F. A. Coward,
Dr. La Bruce Ward,
Dr. Lindsay Peters,
all of Columbia.

Drs. W. C. Marrett and B. F. Sloan, of Oconee, Dr. C. B. Earle retiring President of the South Carolina Medical Association has received his commission. Dr. S. C. Baker, Chairman of Council has been named by the Governor Surgeon General of the National Guard. Dr. E. A. Hines, Secretary-Editor of the Association has been appointed by the President a member of the District Exemption Board for the Western Federal District and Dr. Robt. Wilson Dean of the Medical College of the State of South Carolina has been appointed a member of the District Exemption Board for the Eastern Federal District.

From Newberry the names of Drs. F. D. Mower, T. B. Wood and Jno. B. Setzler have been reported as Commissioned in the Medical Officers Reserve Corps.

Dr. Frank Parker, of Charleston, and a number of others have already been called for duty.

All honor to these men and many more who will now rapidly come forward we believe and send in their applications for Commissions.

PHYSICIANS IN SOUTH CAROLINA APPOINTED ON EXEMPTION BOARDS.

Abbeville—Dr. G. A. Neuffer, Dr. C. C. Gambrell.
Aiken—Dr. H. H. Wyman.
Anderson—No. 1. Dr. B. A. Henry, No. 2. Dr. W. A. Tripp, Dr. Frank Lander, N. 3. Dr. A. B. Weathersbee and Dr. H. M. Babb.
Bamberg—Dr. J. J. Cleckley.
Barnwell—Dr. D. K. Briggs.
Beaufort—Dr. M. G. Elliott.
Berkley—Dr. R. Y. Dwight.
Calhoun—Dr. T. H. Dreher and Dr. J. K. Fairey.
Charleston—Dr. E. H. Barnwell.
City of Charleston—Division No. 1. Dr. C. W. Kollock.
Division No. 2. Dr. G. McF. Mood.
Cherokee—Dr. S. B. Sherard.
Chester—Dr. H. E. McConnell.
Chesterfield—Dr. T. E. Wannamaker, Jr.
Clarendon—Dr. W. M. Brockington.
Colleton—Dr. L. M. Stokes.
Darlington—Dr. William Egleston.
Dillon—Dr. D. M. Michaux.
Dorchester—Dr. J. B. Johnston.
Edgefield—Dr. R. A. Marsh.
Fairfield—Dr. Samuel Lindsey.
Florence—Dr. E. P. Covington.
Georgetown—Dr. W. M. Gaillard.
Greenville—N. 1. Dr. B. F. Goodlett, No. 2. Dr. R. C. Bruce.
Greenville No. 3. Dr. H. L. Shaw.
Greenwood—Dr. George P. Neel.
Hampton—Dr. J. N. Campbelle.
Horry—Dr. H. H. Burroughs.
Jasper—Dr. W. B. Ryan.
Kershaw—Dr. J. W. Corbett.
Lancaster—Dr. S. L. Allen.
Laurens—Dr. J. N. Teague.
Lee—Dr. R. O. McCutcheon.
Lexington—Dr. P. C. Timmerman.
McCormick—Dr. M. W. Cheatham.
Marion—Dr. Z. G. Smith.
Marlboro—Dr. J. F. Kinney.
Newberry—Dr. J. M. Kibler.
Oconee—Dr. E. A. Hines.
Orangeburg—Dr. L. C. Shecut.
Pickens—Dr. J. L. Valley.
Richland—Dr. J. W. Wessinger.
City of Columbia—Dr. J. Heyward Gibbes.
Saluda—Dr. D. B. Frontis.
Spartanburg—No. 1. Dr. W. H. Chapman, No. 2. Dr. W. B. Patton.
No. 3, Dr. Jas. L. Jeffries.
Sumter—Dr. J. A. Mood.
Union—Dr. R. R. Berry.
Williamsburg—Dr. E. T. Kelly.
York—No. 1. Dr. W. W. Fennell, No. 2. Dr. E. W. Pressley.

ORIGINAL ARTICLES

MEDICAL EXAMINATION OF THE SCHOOL CHILDREN OF THE CITY OF FLORENCE, S. C.

By M. R. Mobley, M. D., Health Officer.

PERIODICAL examination of school children by physicians has come to be a recognized public function in all civilized nations. Medical inspection had its origin in the United States in Boston in 1894, and later in 1906 it was made compulsory throughout Massachusetts. In 1907 the British Parliament made it compulsory throughout England and Wales; while in Japan it had become general much earlier than this. In Europe the medical inspection of schools has been carried much farther than in this country, and begins with inspection of all plans for new school buildings.

Th original purpose of medical inspection in schools was to safe-guard the public health, and this is still one of its primary functions. However it has another purpose which concern only indirectly the public welfare, but affecting directly the welfare of the individual child, both for the present and for the future, and this is to "ascertain whether the child is suffering from defective eye sight or hearing, or from any other disability or defect tending to prevent his receiving the full benefit of his school work."

The physical well being of school children has been a matter of too much indifference in the past. Heretofore educators and parents in general have labored under the impression that all children had to have the common diseases of childhood. Mouth breathing has been looked upon as a habit. Nearsightedness has been excused upon the ground of poor light, or possibly a habit which the child has formed.

All children have been placed on an equal footing, regardless of their mental or physical condition, and he who could not keep the pace on account of some physical defect, which if detected, could in all probability have been remedied, has been as unquestioningly left behind as the child who loses his place in school on account of illness. A child's standing in school depends as much on physical qualities and conditions as on moral and intellectual ones.

When the medical inspection of the school children of the City of Florence, S. C., was first contemplated, all physicians and dentists in the city were interviewed and all agreed to give their services to the health department free of charge.

The examinations were conducted in the grammar schools of this city, two of them being white schools and one colored school. Suitable clinic rooms were fitted up at each of these schools, with a retained nurse in attendance at each of the clinics. A weekly schedule of clinics was made and sent to each physician and dentist who assisted in the work.

The physical examination is grouped under three divisions; a general examination; and a dental examination, and an examination of the eye, ear, nose and throat. The general examination was made by a

general practitioner, the special examination in the majority of instances was made by a specialist in eye, ear, nose and throat. The examiners' findings were recorded by a secretary on the following card:

Department of Public Health—
Florence, South Carolina
MEDICAL INSPECTION OF SCHOOL CHILDREN.

Name .....St. Address ....Date..
School ..Age ..Sex..Color..Grade..

Clinical Examination.

General Appearance .....
Physical .....
a. Well nourished?.....
b. Anaemic .....
Mental .....
a. Active.....b. Sluggish.
Condition of Skin .....
a. Scabies?.....d. Impetigo?....
b. Ring Worm?.....e. Pediculosis?
c. Eczema? .....
Vaccinated .....
Glandular Condition .....
.....
Any Deformity .....
Lungs .....
Heart and Vessels .....
Evidence of Contagious Diseases....
a. Varicella.....e. Measles.....
b. Scalatina.....f. Mumps.....
c. Variola.....g. Pertussis....
d. Diphtheria .....
Other Diseases .....
.....
Remarks .....
.....
.....
.....
.....
.....

Dental Examination.

Hygiene .....
A. Tooth Brush Used
.....
b. Dental Attention .....
.....
Occlusion .....
a. Malocclusion .....
b. Maposition .....
.....
.....
Dental Examination .....
Caries .....
a. Deciduous Teeth .....
b. Permanent Teeth .....
c. Odontalgia .....
d. Exposed Pulps .....
Abscesses .....
a. Chronic .....
b. Acute .....
c. Putrescent Pulps .....
Associated Disorders .....
.....
.....
Remarks .....
.....
.....
.....
.....
.....
R. E.....
Eyes-Vision (L. E.....
Lids .....
Disease .....
.....
R. E.....
Ear Hearing (L. E. .....
Pain .....
Discharge .....
Odor .....
Disease .....
Nose:
Cold .....
Catarrh .....
Deformities .....
Throat:
Mouth Breathing .....
Tonsils .....
Adenoids .....
Remarks .....
.....
.....
.....
.....
.....
.....

Medical Examination of School Children--Florence City Schools--Florence South Carolina

| | PARK SCHOOL | | | | | | | | | | | | | | | | CENTRAL SCHOOL | | | | | | | | | | | | | | | | HIGH SCHOOL | | | | | | | | | | | | | | | | WILSON SCHOOL | | | | | | | | | | | | | | | | | | | | All Schools | |
|---|---|---

.....
.....
.....
.....
.....

Teacher .....

M. R. Mobley, M. D., Health Officer.

After the examination of a grade was completed, a notification card was sent to each parent whose child was found defective. The following is the form of the notification card:

Department of Public Realth—
Florence, S. C.
MEDICAL INSPECTION OF SCHOOL CHILDREN.

.....191....

Physical examination shows that..... attending Public School, needs attention for the condition of .....
.....
and I advise that you place..... under the care of a..... as early as possible, so that..... will be in better physical condition to continue school work.

Respectfully,
M. R. Mobley, M. D.
Health Officer.

A record of each child found defective was also filed at the superintendent's office at each of the schools;

Florence City Schools.
Medical Examination of School Children.

.....191....

Report on .....St....
School .....Grade.... Teacher.....
Defective condition found as follows
.....
Treatment advised .....191..
Treatment obtained .....191..
Remarks .....
.....

W. L. Brooker,
Superintendent

The information contained on this card is of the utmost value in following up the medical inspection. The child is required to report when any existing defect is remedied and if at a later date the teacher notes any marked improvement in the childs' mental or physical condition the improvement is noted on the card. The value of a school nurse in this "follow-up" work cannot be overestimated. Her duties are manifold. In the school itself she assists the physician in his regular examinations. She attends the minor ailments, dresses cuts and bruises. Most important of all, however, she is in a position to detect and exclude from school all incipient cases of contagious diseases. One of her chief duties is to establish communication with the home and secure friendly co-operation of the parents.

During our recent inspection of the school children of this city, practically 100 per cent of the children enrolled were examined. The following chart graphically illustrates the results obtained:

CHART—

Of the two thousand three hundred and seventy children examined, two thousand and forty or 86 per cent. were found defective. One is appalled by such a large percentage of defects in children supposed to be normal and healthy. Of course any defect, however slight, such as one decayed tooth, places the child in the defective column. In comparison with the results obtained in other cities, the percentage of defectives in Florence is rather high. This can possibly be accounted for by the fact that medical inspection in this city is in its infancy. A great number of defects have been corrected, and at our next annual inspection we hope to see a great increase in the percentage of normal children. The great majority of defects were found among the younger children:

in fact the seeming neglect of the younger children was somewhat amazing. A possible explanation of this fact is that the parents have never been instructed in regard to these defective conditions, and are therefore in ignorance of their child's physical condition. The solution of the problem lies in educating the parents up to the necessity of keeping their children in as near perfect physical condition as possible, and giving them a chance of competing on an equal basis with the "exceptionally forward" child. It would hardly be an exaggeration to say that the mental efficiency of the school children of this and other cities is decreased from 20 to 30 per cent. through the presence of defects, the great majority of which can be remedied.

Seven hundred and eight-one children or 33 per cent. of the total enrollment of the city schools are in the first grade, while one hundred and six, or only 4-1/2 per cent. are enrolled in the highest grades, the tenth and eleventh. What has become of the large bulk of children who enrolled in the first grades? Have they all stopped on account of having to work? This is unbelievable. Possibly they have had some physical defect which if known, could have been remedied; and this defective condition has so reduced their mental efficiency that they have become discouraged in the unequal race, and have fallen by the wayside. These children will have to go through life uneducated because of the lack of sufficient attention during the first years of their school life. Such seeming parental neglect is rarely due to lack of parental affection, but to ignorance. Familiarity with certain diseases makes them easily tolerable, while in some homes the immediate necessities of life tax the thought and efforts of the parents, and the less pressing give way to the more pressing duties.

Two hundred and seventy-seven, or 11.5 per cent. of the children were Anaemic. The underlying cause of this anaemia, in the majority of instances, was enlarged and diseased tonsils.

Enlargement of the glands of the neck seems to be almost a normal condition in the young children. In the older ones the enlargement was due to diseased tonsils.

The neglect of the teeth in the younger and in a few of the older children was very evident, nine hundred and fifty-seven, or 40 per cent. of those examined did not use a tooth brush, while one thousand eight hundred and forty-five, or 78 per cent. had decayed teeth, either in their temporary or permanent teeth. Unclean mouths promote the growth of disease organisms, and cavities are the centers of infection. Pus from diseased teeth interferes with digestion, lowers vitality and renders mental effort difficult.

Three hundred and ninety-seven, or 16.5 per cent had defective vision in one or both eyes. Among the many defects and disabilities which interfere with school work, this is the most general and usually the most serious. Numerous cases were found in which serious defects have existed for years, unknown to teachers, parents, or to the children themselves. A large number of the cases of conjunctivities and granulated lids were due to defective vision with accompaying eye strain. Some cases however were due to poor light at home and in the school room. A great many of the cases of defective vision were serious enough to require glasses for correction. Many parents could

not afford suitable glasses for their children, in such cases arrangements were made with an oculist to furnish the glasses at cost, or possibly private charity was sought for the purpose.

In our examination an attempt was made to discriminate between an enlarged and a diseased tonsil. A tonsil may be enlarged and yet not be causing any actual harm. Of course where the tonsils are so enlarged as to obstruct breathing and phonation and produce difficulty in swallowing they should receive surgical attention. Seven hundred and twenty-five, or 30.5 per cent. of the children had enlarged tonsils and three hundred and thirty-two, or 14 per cent. had diseased tonsils. These diseased tonsils were not necessarily enlarged. In a great many instances, however, they contained pus. A tonsil so diseased undoubtedly needs immediate surgical attention.

Four hundred and seventy-eight, or 20 per cent. of those examined had adenoids. This little mass of tissue through pressure upon the opening of the Eustachian tubes in the nasopharynx produces more or less deafness, with consequent inattention. Soon the child is looked upon as backward mentally and his progress in school is greatly retarded. In some of the cases of defective hearing it was undoubtedly due, in a great many instances, to the presence of enlarged adenoids.

One hundred and fifty-six, or 6.5 per cent. of those examined had a chronic pharyngitis. In fact, the large number of children with chronically inflammed throats and tonsils was rather amazing. This condition probably accounts for the occasional sporadic case of Diphtheria that occurs in our city. We have been able to detect six diphtheria carriers, and no doubt the future holds more in store for us.

It is human nature to want to excel in anything we undertake. It is an obligation parents owe their children to keep them physically perfect and allow them to obtain the greatest benefits from their school training in their younger years.

EDUCATION WITHOUT HEALTH IS USELESS.

THE DIAGNOSIS AND TREATMENT OF AMEBIC DYSENTERY.

Mr. President, and Fellow Members of the District Medical Association:

AMEBIC Dysentery presents so many clinical types that the diagnosis is by no means easy, and can only be made absolute by finding the Ameba in the feces, with the aid of a microscope. Dr. L. F. Barker says the diagnosis is easy "If one thinks of the possibility of the diarrhea being due to amebiasis, and examines the stool microscopically for ameba."

One of the objects of this paper is to bring to the attention of the Association this disease, not on account of its being of recent discovery —having been brought to the attention of the medical profession in 1859—but because of its being relegated to that large group of diseases considered rare and consequently, that attention has not been paid to it that its frequency and importance deserves.

I agree with Musgrave that the condition should be more correctly given the name "Intesinal Amebiasis" because there are cases which occur without the clinical symptoms, and others have symptoms that would lead one to suspect "amebiasis" but

present features far from those found in typical dysentery. The diagnosis depending entirely on the finding of the ameba and they are at times hard to find, and with some the microscope is not available. I will call attention to a few symptoms that should make one suspect amebiasis: These symptoms are such that when a patient complains of a certain few this disease should be immediately brought to mind and more attention paid to its elimination before deciding the case is not one of "Amebic Dysentery." If one is more nearly convinced that the disease is one of amebiasis than any other, and the ameba are not found in the stools you will not go wrong in trying the therepeutic test, which in the majority of cases will be as positive in its results as that gotten with quinine in malaria.

The finding of the ameba is accomplished by first giving the patient a saline laxative because a flushing of the bowel causes a larger number of ameba to be present in the stool, the stool is liquid and more easily examined. It should be passed in a warm pan in order to keep the ameba motil, and if possible a warm stage used. In the summer time this is not necessary if the feces are examined at once. One of the best methods is to introduce a rectal tube and examine immediately the mucus and blood that accumulates in its eye. In the liquid stool look for mucus, blood or tissue elements and from this take the smear.

There are several different types of ameba found in the intestinal canal but the Ameba Histolytica is the one responsible for intestinal amebiasis. Ameba are cells usually larger than white blood corpuscles, with strongly refractive proto-plasm. On a warm stage they show lively ameboid movements.

The symptoms above referred to, as being suspicious of amebic dysentery, are of course different in the acute and chronic types. In the acute the symptoms are those of dysentery. It is the chronic type that needs to be differentiated from other troubles.

In this type the infection may be masked and latent and marked pathologic changes may be present without objective clinical symptoms and the early recognition of these irregular types is of great importance, especially when amebic dysentery is endemic. I believe a great many cases diagnosed as a "Simple Catarrhal Colitis" are of this type.

In these latent cases dull aching abdominal pains are present, intestinal indigestion, flatulency, at times the pains are made worse on lying down, early in the morning the patient gets up, dresses and finds relief. Aching over the sacrum is another prominent symptom, and at times a sore spot will be present over the lower end of the sacrum, sometimes on one side and then again on the other. The tongue is coated and constipation is usually found. When a diarrhea sets in the abdominal symptoms, such as flatulency and indigestion, are relieved. Most patients will feel better if their bowels act four or five times a day. Emaciation, as a rule, is not pronounced.

In the mild and moderately severe cases the symptoms are more of a diarrhea than a dysentery. The diarrhea is more pronounced in the morning, the so-called morning diarrhea, the patient having to go to stool before he dresses. The abdominal pain is more severe, a pain around the navel, discribed as a

"cutting" around the navel, tenderness on pressure along the colon, fever may be slight or sub-normal, constipation alternating with diarrhea, later the passing of mucus and blood. In these cases the patient may describe his symptoms as being those of a diarrhea, when in reality he may have to go to stool eight to ten times a day but each time he passes only blood and mucus.

In the acute variety the symptoms of dysentery are plain. The fever, as a rule, is not high, stools may number twenty to thirty a day, consisting mostly of blood, mucus and tissue elements, marked abdominal pain, the cutting around the navel, emaciation more rapid.

In all cases a proctoscopic should be made. The ulcers with undermined edges being found in the more severe type and also in the chronic type in which there is a mixed infection. In the beginning of many cases there may be no ulceration, but minute elevated red dots mark the beginning of ulceration. In one of my cases the only pathology found was several red lines, very superficial, crossing each other as do the silk threads in a paper bill. This patient complained of headache and diarrhea lasting from three to four days, re-occuring about every two or three months. On treatment he gained twenty-five pounds in three months. The proctoscopic examination was made between attacks, just before the treatment was started.

The "Bacillary Dysentery" presents the same symptoms as the amebic form, therefore, if the case does not respond to treatment readily examine for the ameba, or use the therapeutic test.

Amebic Dysentery is known to be fairly common in certain parts of the United States. Dr. P. I. Nixon, of San Antonio, Texas, makes the statement that it is nearly as common as malaria in that locality, and as a matter of fact it is more generally distributed and more frequent than is usually supposed. The treatment of this disease, in the past, has been rather unsatisfactory, but within the last four years a new treatment has been introduced. It is upon this line of treatment that I will call to your attention, and, with one exception it will be noted that the most potent, the most successful, and also the most popular agent is the alkaloid emetin. It is used by physicians in many different ways. A few recommend its use in the form of ipecac; a great many as the alkaloid; a few use the Alcresta Tablets and still others that make the statement that it is impossible to cure a majority of the cases of amebiasis without the combination of emetin and ipecac. In other words, emetin is the active agent whether it be used in the form of ipecac or Alcresta Ipecac.

There are so many different ideas as to how the alkaloid must be administered to get the best results, I am going to describe only one method, which, to my mind, is the most radical therefore, most certain of ridding the bowel of the causative agent of the disease.

The customary procedure is to give one-third of a grain of emetin hypodermically three times a day from four to seven days. Larger doses are very irritating to the skin and the smaller doses repeated often answer every purpose, although too small an amount given may cause the ameba to become immune to the drug. After the administration of the emetin rest the patient for a day then begin powdered ipecac in the form of fresh, enteric-coated pills. Begin with three five-grain pills

three times a day, decreasing one pill a day until the patient is taking one three times a day. Continue this dose from two to four days, unless, in the meantime the patient developes a nocturnal or an ordinary diarrhea. If this condition developes, discontinue the pills for a few days then begin them again with the same dose where you left off. Remember that ipecac, in a great many cases, will cause a diarrhea due to its irritating effect on the intestinal mucosa.

The theory of this method is this: It is believed that on account of the ameba burying themselves in the mucosa of the intestinal wall the emetin reaches them through the blood channel but fails as to the ones upon the surface of the mucosa, therefore, the emetin in the form of ipecac pills is given in order to reach the more superficial. Later Alcresta Ipecac may be given because it does not seem to irritate and can be taken in large doses for some time. While this treatment is being given the feces should be examined frequently in order to note when the ameba disappear. I do not believe in the intravenous method of giving the alkaloid, it being too dangerous in its effect. When given sub-cutaneously it is slowly absorbed and also much easier for both patient and physician. Vedder says after seeing rabbits die, immediately after intra-venous of comparatively small amounts of emetin, I should hesitate before administering, even one grain, intravenously. I do not believe that emetin by mouth is of very much value. The dose is necessarily small and on account of its irritating effect it acts only as a purgative.

Some times a diarrhea persists after the ameba are destroyed, especially in long continued attacks of amebiasis. Due possibly to a mixed infection. In these cases installations of one to four ounces of a ten-percent solution of argyrol, or a two-percent solution of protargol into the sigmoid every other day, alternating with fluid extract of Krameria ten-percent solution, four ounces being instilled into the sigmoid through a rectal tube.

The other amebicide, Chaparro Amargosa, was first brought to the notice of the profession by Dr. P. I. Nixon, of San Antonio, Texas, in a paper printed in the Journal of the American Medical Association in which he gives the credit to Dr. J. W. Nixon, of Texas, at whose suggestion it was used in one of his cases.

In this paper he reported ten cases of undoubted amebic dysentery of from three weeks to four years standing. All ten cases were cured and there has been no recurrence so far as can be determined. The period of freedom from symptoms ranging from ten months to two years. In only one case was a living ameba found in the stools after treatment was begun. These cases averaged less than two days before the stools became normal. There were no liver abcesses or other complications.

I will admit after reading the article I was interested but thought it too good to be true. I immediately tried to buy some of the drug on the open market but it was not even listed by any of the larger drug houses. I then, after being advised by Dr. Nixon, obtained a sack of the bush from a Mr. Davis, in Pleasanton, Texas.

I used this drug in one case in which the patient was suffering from a nocturnal diarrhea due to amebic infection. Much to my surprise in two days the diarrhea was checked. Its effect was really far better than I had expected, even

after having read Dr. Nixon's paper.

"Chaparo Amargosa" is a small thorny bush which is indigenous to Southwest Texas and Northern Mexico, growing on thin, rocky mesquite or post-oak land. It grows to be a bush two or three feet in height. Its size depending on the comparative richness of the soil on which it is found. Its leaves are small, its flowers pink, and very small. The matured fruit is a red berry, which is about the size of a pea.

All parts of the plant, from the root to the berry possess the characteristic bitter taste and medicinal properties. It is in the market as a Fl. Ext., the dose being from 1-3 drams before meals.

I used the drug in the form of the infusion, which is prepared by boiling the plant—roots, branches, foliage and fruit—in water from thirty to sixty minutes. No definite weight can be used, as the weight of the plant will vary with the seasons and with its dryness. The infusion should have the color of moderately weak tea.

DR. NIXON'S ROUTINE TREATMENT, is as follows: The patient is kept in bed, if practicable; the diet is restricted to liquids and semi-solid articles; an ounce of magnesium sulphate is given three or four hours before treatment is begun and repeated every two or three days; six or eight ounces of the infusion are given by mouth half an hour before each meal and at bedtime; rectal enemas of from five hundred to two thousand c. c. s. of the infusion are given in the knee-chest posture twice daily, and the patient is instructed to maintain this position for five or ten minutes, and afterward retain the solution as long as possible. The length of time the fluid will be retained varies with the irritability of the rectum and the persistance of the patient; in some it will be only a few minutes, while others will be able to retain it indefinitely. If the large bowel contains fecal matter it is well to irrigate it with normal saline preliminary to giving the enema. It is advisable to continue the treatment for a week or two after the subsidence of all symptoms.

The infusion, as well as the fluid extract, has an intensely bitter taste, but it is a clean bitter, and no difficulty is experienced by patients in taking it. The bitter taste is easily overcome by eating a piece of bread or drinking a little coffee, if necessary. As a matter of fact, the bitter taste is not undesirable, because of its tonic and stomachic effect. No nausea, or other untoward symptoms have followed the administration of this drug, and so far as is determined, it exerts no detrimental influence on the human organism even in large doses.

The active principle of "Chaparro Amargosa" has not been satisfactorily isolated. Tannin is not responsible for the action of the drug, as the detannated fluid extract is no less potent than the original fluid extract. This drug is not indicated in ordinary diarrhea and is probably without action in other parasitic intestinal infections.

ORAL INFECTIONS.

President and Gentlemen of the South Carolina Medical Association:

I AM delighted to have this opportunity of being with you while it is a great personal pleasure, it is also an official duty, being here as the representative of the South Carolina State Dental Association. Individually my presence is of little im-

portance, but the mere fact that I came representing the dental profession, justifies in itself, the desire and earnest effort of my branch of medicine, to do our part in helping solve the many and obscure questions that are daily arising in our chosen field of science.

At this particular present time perhaps the word dentist suggests more vividly to your minds, the popular and much discussed subject of focal infections, than any other one thing. I shall, therefore, register a few thoughts on the general subject hoping they may be acceptable to you.

We as a profession had been preaching the doctrine of oral infection for years, but it was not until Dr. Mayo took up the banner, that your profession began to sit up and take notice, and now, as was to be expected, the pendulum has swung a little too far in the direction of the oral cavity and its environs, but this present move of enthusiasm is necessary in order to reach a rational and conservative understanding of the processes involved and when it has spent its force, we will all be much wiser and in a position to proceed in a more certain and intelligent manner with our fight against the infections and their sequelae.

Dr. Mayo has said that the next great step in preventative medicine must come from the dental profession. It looks very much at the present time as tho this is true, but as yet unfortunately, the desired goal is not in sight, let us hope that some one will soon stumble over a solution of these our present troubles.

As the matter stands to-day the oral cavity is a constant menace from the cradle to the grave. In childhood, starting with dentition, we find the most profound general systemic disturbances evoked by a retardation of a physiological process. Later on in child life we have a whole catalogue of diseases, finding their inception or entrance in the oral cavity thro the medium of the portals which are almost sure to be present at this period, namely, decayed teeth and gum lesions, not to mention the grave results that oftime follow the retarded bone developments or the absence of proper masticating surface. From adolescense to old age again it is an ever increasing menace and many heart, kidney, joint and other lesions, trace their origin to the oral cavity during this period.

That many of the various forces of infections find their foci in the oral cavity we believe to be true. And the first step in our efforts to control secondary manifestations must be the eradication of mouth infections. It must be recalled tho that the human economy contains organs other than the teeth and tonsils that are capable of producing manifestations just as profound and virulent.

So well known have the teeth and tonsils become, that to-day not only the profession, but the public have taken up the cry, and most any one of your patients can not only diagnose their own case, but will prescribe the treatment, "Pull out the teeth and cut out the tonsil." Unfortunately tho, in a great majority of cases this treatment doesn't seem to work the magic cure that was predicted. Something else seems to be at fault. Then explanations are in order, and a further hunt is started to see what other organs can be sacrificed on the alter of progress.

What most concerns us as dentists is to find or work out some method by which we can with some degree of cer-

tanity so treat pulpless teeth that as the years roll by they will not come under the bane of the Radiographer and the diagnostician. We have not as yet found a method, so many teeth whose only crime is that they look suspicious, must yet awhile be condemned and sacrificed in the interest of science.

With regard to the X ray. I do not believe that many of the dental organs condemned by this method are in reality seats of infection. In order to understand the conditions surrounding a pulpless tooth, it is necessary to understand the influence which caused its being pulpless, and in a majority of cases it will be found that the pulps were surgically removed and during the operation the tissues surrounding the apex of the tooth were injured, not necessarily infected, but injured, thereby causing the pictures to show a rarified area of scar tissue which in most cases is perfectly harmless.

These teeth it must be remembered have usually been treated with arsenic, chloride of zinc, or formal dehyde. Any or all of which cause death to the cellular tissues, and it is only reasonable to think that the very small and indefinable outlined areas so often seen at the apices of devitalized teeth are the old scars from the use of these agents.

It has been my experience, and that of others also that where we find an infection, that is causing secondary manifestations there is not any difficulty in recognizing it in the picture, there are exceptions of course, but the majority I believe show up well defined and unmistakable.

The weakest link in the whole chain is our inability at the present time to trace the infection to its proper source, and until some method is found to discover beyond peradventure which focus or facit are responsible for a given manifestation, we must continue to empirically condemn and uselessly sacrifice many unoffending organs. It has been suggested that perhaps certain forms of organisms exhibit unmistakable selective proclivities. This if true, may help us solve the problem, and we can hope at least that something valuable may develop from it, and that it will not meet the ignominious fate of the late departed emetine theory. And speaking of Emetine, Pyorrhoea is a constant source of concern to both professions. Pyorrhoea, on account of its recent publicity during the emetine campaign, has eradicated every other recognized desire of the gingiva. Stomatitis, pericementitis and gingivitis are all no more, they are all pyorrhoea now adays. Have you noticed that no body ever tells you that they have Riggs Disease, they all have pyorrhoea.

While pyorrhoea is undoubtedly very prevalent, a majority of the conditions so diagnosed are simple cases of gingivitis, of course gingivitis allowed to run its course uninterrupted will develop into pyorrhoea, but if given the proper treatment in its early stages it is readily cured. The same cannot be said of pyorrhoea, for I for one, am still under the impression that pyorrhoea can not be cured. I think it can be controlled, but I have yet to see a case which I recognize as cured.

The presence of the pus cell in the mouth is not necessarily an evidence of pyorrhoea. Some writers go so far as to state that the pus cell is a constant inhabitant of the oral cavity and I must say that I believe, in the vast majority of mouths, at all times the pus cell can be found, whether it is

there to furnish food for our old friend the amoeba, or whether the amoeba is there to feed on it, I don't know, but very constant in the oral secretions. Just exactly what role they play in the pathology of this region is yet to be determined.

What our profession in the future must do is to find the means of eliminating the apical abscess, and controlling the ravages of pyorrhoea. Then it will be up to you to devise a process of tracing a secondary infection to its true source, the time will then have arrived, when if nothing new has come along in the mean time, we will be in a position to be of real service to suffering humanity.

MINUTES

(Continued from June Issue)

THE PRESIDENT: You have heard the report of the committee; what is your pleasure?

DR. HARRY WYMAN: I move that it be accepted, and that the election of the Committeemen be gone into.

Motion carried.

DR. CATHCART: The first would be a scientific committee, to consist of three members, to take charge of the scientific program, who shall be elected by the House of Delegates to serve for one, two or three years, to act with the Secretary.

DR. BRAILSFORD: Mr. President, how have they been appointed previously?

THE PRESIDENT: By the chair, but the suggestion is that they be elected by the House of Delegates.

DR. WYMAN: How was that?

DR. CATHCART: One for one, one for two, and one for three. The election to-day will be for one, two, and three years. Hereafter one man will go off each year.

DR. ROSS: Mr. President, I nominate Dr. Hines for three years.

THE PRESIDENT: Dr. Hines is Secretary and ex-officio member of that committee.

DR. ROSS: I nominate Dr. Cathcart for three years.

Seconded by several.

Moved by Dr. Burdell that the rules be suspended and that Dr. Cathcart be elected for three years.

Motion carried.

DR. KOLLOCK: I nominate Dr. Coward for that committee.

DR. COWARD: I move that for the two-year term that the Secretary of the State Board of Health s[illegible] two years, and that the Secretary of the Spartanburg Board of Health serve for one year, provided he is a member of the Association.

THE PRESIDENT: Dr. Coward is nominated by Dr. Kollock, and Dr. Kollock nominates Dr. Hayne and the Secretary of the Local Board of Health of Spartanburg, if he is a physician.

Dr. ———— The Secretary of the Spartanburg Board of Health is not a physician, but the President is.

DR. YOUNG: I do not know the personnel of the Board of Health here at all. My idea was that this House of Delegates consider the personnel of the men put on this committee.

DR. LANCASTER: I am satisfied in my mind that the President of this

Board of Health is a competent man. His name is H. R. Black.

DR. COWARD: I withdraw my nominee.

DR. LANCASTER: I nominate Dr. H. R. Black.

Upon motion, nominations closed and Dr. Coward elected for the two-year, and Dr. Black for the one-year term.

DR. CATHCART: As to the standardization of hospitals, that the committee be increased to five and elected from this Association.

THE PRESIDENT: Dr. Robert Wilson, Dr. Hines and Dr. S. C. Baker, I think, are the members.

DR. CATHCART: Then it would be in order to nominate two others on this committee.

DR. ROSS: I nominate Dr. Young of Anderson, and Dr. Brailsford nominates Dr. La Bruce Ward of Columbia.

Moved and seconded by Dr. Ross that nominations be closed and that Doctors Young and Ward be nominated on this committee.

Motion carried.

DR. FRONTISS: I would like to make the motion that sometime this year the roll of membership be published in the Journal.

Motion carried.

THE PRESIDENT: The "Ayes" have it, and the Editor will be instructed to publish the rosta in the Journal, sometime during the coming year.

SIMS MEMORIAL COMMITTEE.

DR. HINES: I think it is Dr. Baker's idea that conditions have been such for the last two or three years that the committee has very little encouragement to push the matter. In other words, the whole thing is in abeyance. That was our conversation this morning, and it seemed to be his opinion, though I am not making the report for him. It looked like something happened, he said, every time.

DR. BOOZER: As Chairman of the Committee on the revision of the Medical Practice Act, I would like to say:

The Committee, after considering this matter carefully as to whether that matter should come up at the last session of the Legislature, decided, after advice from those we knew best, that on account of the fact that it was a new Legislature, with probably thirty old members, it was not wise to bring the matter up at that time. So the thing was held over. Unless, however, something happens in the meantime, the matter will come up at the next Legislature.

In the meantime, however, we would be glad if the members of the Association could see their representatives and get their co-operation when the matter comes before the Legislature. A man at home can do much more with his representative than we down there at the State House, trying to explain the matter to him there; so if there is anything by which this matter could be taken up with the men at home, we would be glad if this could be done.

THE PRESIDENT: Does the House desire to take any action upon the matter.

COMMITTEE ON MEDICAL EDUCATION.

DR. HEYWARD GIBBES: I am sorry to say we have no report to make to the House of Delegates. This Committee was never properly organized, for some reason, and never got down to practical work.

I would like to take this opportunity to suggest to the House of Delegates that the Committee, instead

of consisting of five men, be somewhat enlarged, and the duties to be assigned to this committee be more definitely specified.

I should like to see the Committee organized with the definite purpose of visiting, at least once a year, the College in Charleston, and going over the situation without any official connection with the place, and bringing recommendations to this body as to any changes they see fit. Furthermore, the most far-reaching influence of this Committee is possible in attempting to systematize education in this State, looking to the study of medicine, and at the University of South Carolina I took the matter up with the professors of chemistry, physics, and biology, and looked into the matter of the training of their students. If this committee could be so organized as to be scattered through the State, one member located at the various sites of the seats of learning, they could come into more intimate contact with the professors of the instituiton, and the class can be much more systematized.

I think Spartanburg, Greenville, Due West, Newberry, Rock Hill, Columbia and Charleston could be represented on this Committee, one physician from each of those communities to have the present Chairman appointed, and to do this work from these various centers, with the specified duty of visiting the College in Charleston at least once during the year.

THE PRESIDENT: Will the House take any action upon this?

DR. EDGERTON: I move that the suggestions be accepted and the changes be made.

THE PRESIDENT: It is moved that this committee be increased to eight.

DR. HARRY WYMAN: I amend that by recommending that the chair appoint a member from each one of these seats of learning.

DR. HEYWARD GIBBES: I would suggest that the total number of the Committee be changed to nine, and from those centers I think the committee could handle the situation throughout the State.

THE PRESIDENT: You have heard the motion of Dr. Edgerton.

DR. COWARD: I move to amend that by increasing the Committee to ten, by including Anderson.

Motion seconded and carried.

EDUCATIONAL COMMITTEE.

THE PRESIDENT: On this Committee I appoint from Columbia, Dr. Heyward Gibbes, Newberry, Dr. Elbert Pelham, Charleston, Dr. Robert Wilson, Rock Hill, Dr. Fennell, Due West, Dr. Bell, Clemson, Dr. Redfern, Greenville, L. O. Mauldin, Spartanburg, D. B. Lyles, Anderson, Dr. Ross, Clinton, Dr. Bailey.

REPORT OF THE CHAIRMAN OF THE COUNCIL, DR. S. C. BAKER.

Spartanburg, S. C. April 17, 1917.

To the House of Delegates of the South Carolina Medical Association.

Gentlemen:

The Board of Councillors, to whom the petition submitted by certain members of the Greenville County Medical Society to the House of Delegates was referred, beg to report that it has met and considered the questions involved in said petition.

No names were mentioned in the petition but Drs. J. W. Jervey and J. W. Curry of the Greenville County Medical Society stated that they were the parties alluded to in the petition.

Each party to the controversy

made its showing. Dr. Powe, who represented the Greenville County Society claiming, however, that his society had not been given sufficient time in which to prepare its answer to the appeal.

After carefully considering the matter the council, having first decided that in its opinion the Greenville Society had been given a reasonable opportunity to make its showing, unanimously recommend in view of all the facts presented:

1st. That the formal statement of charges of unethical and unprofessional conduct, as submitted to the Greenville County Medical Society against Drs. J. W. Jervey and J. W. Curry, be printed in the Journal of the South Carolina Medical Association, together with the findings of the Board of Censors of the Greenville Medical Society exonerating Drs. Jervey and Curry from said charges, but that all the evidence adduced at the hearing and all comment upon it as it appeared in the full record of the investigation, be eliminated from the publication.

2nd. That in regard to the last clause of the petition which seeks to restrict the bringing of such charges against a member of a society, we see no practical way of limiting the matter and accordingly have no recommendation to make.

S. C. Baker, M. D.,
Chairman of Council.

DR. GIBBES: Mr. President, I move, Sir, the adoption of the report of the Board of Councillors.

Seconded.

DR. POWE: Mr. President, this petition was brought up over here without the knowledge of the Greenville County Medical Society at all. I knew nothing of it until two days ago. It seems to me it would be pretty insulting to the Greenville County Society to come here and review their action without giving them notice. I think it would be extremely unwise to overrule the Greenville County Medical Society. In case this thing is not hushed up these men will be charged again, and probably with a different outcome. For the sake of peace and harmony I hope that this will be allowed to develop right here.

The President of the Greenville County Medical Society is in the hall and I would suggest that we hear from him.

DR. COWARD: Mr. President, I think that none of us wish to have this thing threshed out any farther. Personally I have too warm a regard for all these men. We agreed this morning to refer the matter to the council. That has been done. We are not here to try this case, so far as I can see.

THE PRESIDENT: THE motion is to adopt the report of the council.

DR. LANCASTER: Question.

THE PRESIDENT: Are you ready for the question?

The motion is for the adoption of the report of the Council. All in favor of it say "Aye;" opposed, "No."

The report is adopted.

We are under the head of Miscellaneous Business. Is there any further miscellaneous business to come before this Society?

There being no further business, the motion to adjourn is in order.

Motion made, seconded and carried.

HEREDITY AND CONTAGION IN CANCER.

To Health Editors and Special Writers:

Your attention is directed to an important statistical study of the

above subject, the results of which have recently been announced by Mr. Arthur Hunter, President of the Association of Life Insurance Presidents, as per inclosed abstract.

Perhaps no aspect of the cancer problem causes such wide-spread apprehension as the possibility of its being inherited. Broadly speaking such fears are probably groundless. When the disease occurs repeatedly in the same family there is a tendency to assume that it is inherited. This reasoning is of course superficial. Newsholme, Bashford and many other authorities have frequently pointed out that cancer is such a common disease among adults that by the laws of chance alone many cases are likely to occur in some families. It should be remembered that among people over forty years of age in this country cancer causes the death of one woman out of every eight and one man out of every fourteen. It is obvious that repeated instances must occur in some families and this of itself does not prove that cancer is hereditary.

Important laboratory studies tend to prove the hereditary transmission of a liability to cancer among mice, but many leading authorities believe that we are not yet justified in applying these deductions to the human subject. Previous statistical investigation among human beings has failed to establish the inheritance of cancer and Mr. Hunter's study merely adds to the mass of evidence against heredity as a causative factor. In passing upon applications, insurance companies generally regard the history of cancer in the family as of little signficance.

While the question of heredity cannot be viewed as absolutely settled, nevertheless the Publication Committee of this Society believes that the practical bearings of competent investigations of the human material should be brought home to newspaper readers in an effort to reduce the present excessive apprehension among the people regarding the possibility of inheriting cancer.

With regard to contagion we are on even fimer ground and the question may be regarded as settled. After countless operations there is no case recorded in which a surgeon or nurse has acquired cancer from the treatment or attendance upon any patient suffering from this disease. The public should be taught that the fear of infection is groundless since apprehension on this score has undoubtedly tended in many cases to prevent the most humane care of sufferers from a disease which, especially in its advanced stages, demands the utmost resources of patient and merciful ministration on the part of relatives and nurses.

Mr. Hunter's address has already been referred to in the news columns of many papers, but we trust that if you have not already done so you will make it the subject of editorial comment. For your convenience this connection an abstract of the paper is inclosed. The full address can be obtained on application to Mr. George T. Wight, Secretary of the Association of Life Insurance Presidents, 165 Broadway, or to the author, Mr. Arthur Hunter, New York Life Insurance Company, 346 Broadway, New York City.

On behalf of the Publication Committee, I am

Yours very truly,

Curtis E. Lakeman,
Excutive Secretary.

Anderson, S. C., Jan. 10th, 1917.

Dr. E. A. Hines, Secty-Treas., South Carolina Medical Association, Seneca, South Carolina.

Dear Sir:

In accordance with your instructions, I have audited the books and accounts of the South Carolina Medical Association and attach hereto statement, made in the form of your Annual Report to the Association, which exhibits the Receipts and Disbursements (including overdraft at bank Jan. 1st, 1916) for the year ending December 31st, 1916, also a Statement of the Assets of the Association, there being no Liabilities.

I hereby certify that this Report is correct as shown by your books at the date above mentioned.

Respectfully,

C. C. Dargan,
Public Accountant.

SOCIETY REPORTS

PICKENS COUNTY MEDICAL SOCIETY

Central, South Carolina.

July fourth, Nineteen Hundred and Seventeen.

By Special Invitation

Ten A. M., to Five P. M.

PROGRAM

10:00—11:00 A. M.

"Renal Infections and Treatment."

Dr. C. F. Ross, Anderson, S. C.

11:00—12:00 M.

"Gall Bladder Infections and Treatment."

Dr. J. C. Harris, Anderson, S. C.

12:00 M.—1:00 P. M.

"An Actual Tonsillectomy Performed in the Presence of the Society.

Dr. W. H. Nardin, Anderson, S. C.

1:00—2:00 P. M.

An "Old Fashioned Basket Picnic Dinner," served by the Ladies of Central. Say, "Doc!" You will enjoy this. After dinner toasts and speeches. "Free for all."

2:00—3:00 P. M.

"A Plea for the Child Welfare Work in Time of War."

Dr. E. A. Hines, Seneca, S. C.

3:00—4:00 P. M.

A general discussion on the Prevention, Diagnosis and Treatment of Typhoid Fever.—Opened by Dr. Frank Lander, Williamston, S. C.

4:00—5:00 P. M.

A lecture on the purposes and work of the Red Cross Society in the presen War—Opened by Dr. W. H. Nardin, Anderson, S. C.

Discussion by U. S. Medical Officers, and Members Present.

L. G. Clayton,
W. A. Woodruff,
J. D. Bearden,
Committee.

PROGRAM
FIFTH DISTRICT MEDICAL SOCIETY

Of South Carolina July 11, '17.

10:30 A. M., Masonic Hall.

1—Address of Welcome in Behalf of the City of Chester—Hon. Z. V. Davidson, Mayor.

2—Address of Welcome in Behalf of the Chester Chamber of Commerce—Mr. R. B. Caldwell, President.

3—What is being done at the State Hospital for the Insane and the Treatment and Care of the

patients—Dr. C. F. Williams, Columbia, S. C., Superintendent.

4—Frequency of Urination in Women—Dr. R. H. Lafferty, Charlotte, N. C.

5—Advertising Public Health—Dr. L. A. Riser, Columbia, S. C., Director of Rural Sanitation.

6—Removal of Tonsils and Adenoids by the General Surgeon—Dr. R. T. Ferguson, Gaffney, S. C.

7—Urinary Lithiasis-Diagnosis and Treatment—Dr. N. Bruce Edgerton, Columbia, S. C.

8—Subject Unannounced—Dr. W. C. Twitty, Rock Hill, S. C.

9—Whom should we seek to bring in the Medical Association and Why?—Dr. E. W. Pressley, Clover, S. C.

3:30 P. M.

Dinner at one of the local hotels. The society will be the guests of the Chester County Medical Society.

ENTERTAINMENT COMMITTEE.

Dr. W. M. Love Dr. W. R. Wallace
Dr. S. W. Pryor

PROGRAM
GREENVILLE COUNTY MEDICAL SOCIETY

JULY 2, 1917

Dr. George T. Tyler—Exopthalmic Goiter

Dr. J. A. Thomson—Diagnosis and Treatment Typhoid Fever

AUGUST 6, 1917

Dr. R. E. Houston, Differential Diagnois and Treatment Different forms of Dysentery.

SEPTEMBER 3, 1917

Dr. W. B. Sparkman—Ectopic Pregnancy Diagnosis and Treatment.

OCTOBER 1, 1917

Dr. E. W. Carpenter—Common Colds.

NOVEMBER 5, 1917

Dr. T. G. Sharpe—Diagnosis, Prognosis and Treatment Posterior Urethritis.

Dr. W. M. Burnett—Cause and Treatment Postpartum Hemorrhage.

DECEMBER 3, 1917

Dr. Alva S. Pack—Diagnosis and Surgical Treatment Empyema.

Election of Officers.

Each man shall select and notify two men to discuss his paper.

John W. Parker, Secretary.

BOOK REVIEW

IMPOTENCY, STERILITY, AND ARTIFICIAL IMPREGNATION.—By Frank, P. Davis, Ph. B. M. D. Fellow American Medical Association; Ex-Secretary Oklahoma State Board of Medical Examiners; Former Superintendent Oklahoma State Institution for Feeble-Minded; Author of "How to Collect a Doctor Bill," "The Doctor: His Book of Poems," "The Physician's Vest-Pocket Reference Book," etc.; Formerly Editor and Publisher, Davis' Magazine of Medicine.

ST. LOUIS C. V. MOSBY COMPANY 1917.

ACUTE POLIOMYELITIS.—By George Draper, M. D. Associate in Medicine College of Physicians and Surgeons, Columbia University; Associate Attending Physician Presbyterian Hospital New York City. With a foreword by Simon Flexner. With Nineteen Illustrations. Philadelphia, P. Blackiston's Son & Co., 1012 Walnut Street. Price $1.50.

AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY.—Transactions of the Seventh Annual Meeting Milwaukee, October 19-21, 1916. Headquarters of the Association Medical and Chirurgical Faculty Building 1211 Cathedral Street, Baltimore, Md. Press of Franklin Printing Company, Baltimore, 1917.

One of the worlds most important organizations representing Child Welfare Work is the American Association, for the Study and Prevention of Infant Mortality with headquarters in Baltimore, is before us for review. This represents the transactions of the last meeting at Milwaukee in 1916. One of the notable papers is by Dr. Grace L. Meigs of the Children's Bureau, U. S. Department of Labor, Washington, D. C., on the subject of Rural Obstetrics. We note that Dr. Meigs gives an illustration from the South, especially among the colored population. Dr. Meigs says that great progress has been made along the line of rural nursing and that in this country a considerable number of nurses are employed whose salary and expenses are paid by the Board of Supervisors, that many State Legislatures have passed laws permitting the employment of nurses by such boards; that many public health nursing organizations are doing rural work, and that some work is done also by the Red Cross. Dr. Meigs urges Hospital care for complicated cases in every county and admits that the care of normal cases in many rural districts is a most difficult problem to solve satisfactorily.

Another timely paper is on the Problems of the Rural Mother in feeding infants, by Dr. DeVilbiss, Division of Child Hygiene, State Department of Health, Topeka, Kansas.

A number of excellent papers were read on the subject of Infantile Paralysis.

In looking over the list of members of this great Association we found only two from South Carolina, in fact comparatively few from the Southern States. Yet the problem of Infant Mortality is of urgent importance in this section of the country.

THE MEDICAL CLINICS OF CHICAGO.—Volume II Number VI (May 1917). Octavo of 252 pages 46 illustrations. Philadelphia and London: W. B. Saunders Company, 1917. Published Bi-Monthly. Price per year: Paper, $8.00; Cloth, $12.00. W. B. Saunders Company, Philadelphia, London.

Among the articles in this issue we note the following:

Clinic of Dr. Frederick Tice, Cook County Hospital, Anaphylaxis, page 863.

Clinic of Dr. Isaac A. Abt. Michael Reese Hospital (Sarah Morris Memorial Hospital for Children) Pyelitis 895.

Clinic of Dr. Charles Spencer Williamson, Cook County Hospital.

Three Cases of Pericarditis page 907.

Case I. Purulent Pericarditis (Pyopericardium), with a Discussion of Pericardotomy by Dr. Kellogg Speed, page 907.

Case II. Hemorrhagic Pericarditis, with Acute Septic Endocarditis.

Case III. Serafibrimous Pericarditis page 927.

Clinic of Dr. Herman L. Kretchmer, Presbyterian Hospital, Fulguration Treatment of Bladder Papillomata page 941.

Clinic of Dr. Ralph C. Hamill, Northwestern University Medical School Paralysis Agitans page 949.

Clinic of Dr. Arthur F. Beifeld, Cook County Hospital Chlorosis Controbution by H. H. Schuhmann, M. D. D. S., Chicago, The Relationship of Oral Foci of Infection of Systemic Diseases page 991.

Clinic of Dr. Solomon Strouse, Michael Reese Hospital Inanition in the Treatment of Diabetes Mellitus page 999.

Clinic of Dr. Charles Louis Mix, Mercy Hospital, Bacillus Aerogenes Capsulatus Infection of the Intestines page 1007. Aneurysm of the Aorta page 1017.

Clinic of Dr. Frank Wright, Northwestern University Medical School Two-Hour Renal Test page 1039.

Clinic of Dr. Frank Smithies, Augustana Hospital Retroperitonel Sarcoma page 1037.

Clinic of Dr. B. C. Corbus, Central Free Dispensary, Rush Medical College. The Treatment of Specific (Gonorrheal) Urethritis. Anterior and Posterior, page 1057.

Clinic of Dr. Joseph C. Friedman, Michael Reese Hospital. The Diagnosis and Treatment of Chronic Constipation page 1071.

INTERNATIONAL CLINICS.—A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynaecology, Orthopaedics, Pathology, Dermathology, Ophthalmology, Otlogy, Rhinology, Laryngology, Hygiene, and other Topics of interest to Students and Practitioners. By Leading Members of the Medical Profession Throughout the World. Edited by H. R. M. Landis, M. D., Philadelphia, U. S. A. With the collaboration of Chas. H. Mayom, M. D., Rochester. Sir Wm. Osler, Bart., M. D., F. R. S. Oxford. Rupert Blue, M. D., D. P. H. Washington, D. C. Frank Billings, M. D. Chicago. John G. Clark, M. D. Philadelphia. A. McPhedran, M. D., Toronto. James J. Walsh, M. D., New York. J. W. Ballantine, M. D., Edinburg. Charles Greene Cumston, M. D., Geneva. Arthur F. Beifeld, M. D., Chicago. Richard Kretz, M. D., Vienna. With correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels, and Geneva. Volume II. Twenty-Seventh Series, 1917. Philadelphia and London. J. B. Lippincott Company. Price $2.00.

In this issue quite a number of stenographic reports of Clinics held in various prominent hospitals have been given, Johns Hopkins, University of Pennsylvania, Harvard Medical School, Wills Eye Hospital Philadelphia, and in addition a resume of the literature as usual.

THE PRACTICAL MEDICINE SERIES.—Comprising ten volumes on the year's progress in medicine and surgery. Under the general editorial charge of Charles L. Nix, A. M., M. D., Professor of Physical Diagnosis in the Northwestern University Medical School. Volume II. General Surgery. Edited by Albert J. Ochsner, M. D., F. R. M. S., LL. D., F. A. C. S. Surgeon-in -Chief Augustana and St. Mary's of Nazareth Hospital; Professor of Surgery in the Medical Department of the State University of Illinois. Series 1917. Chicago. The Year Book Publishers, 608 S. Dearborn Street.

The great work of editing the Surgery Volume of the Practical Medicine Series has been in the hands of that master surgeon, John B. Murphy for many years and since his death his mantle has fallen upon Dr. Albert J. Ochsner, indeed a worthy successor to one of the worlds most brilliant writers. In the volume before us the present Editor-in-Chief has paid a worthy tribute to Dr. Murphy, his predecessor. Much attention has been paid to anesthesia in the opening chapters. Military Surgery has been given a prominent place.

ABSTRACTS

The following are abstracts of articles in the issue of The Journal, May 12, 1917:

NATURAL FOODSTUFFS.

The supplementary dietary relationship among our natural foodstuffs has been studied by E. V. McCollum, Madison, Wis. (Journal A. M. A., May 12, 1917), who says in order to illustrate these, it is necessary to show evidence that we are able to devise experimental procedure adequate to reveal such relationships, also that we have now sufficiently complete knowledge of the essential factors needed in making a diet for the growing animal to enable us to interpret correctly the results of feeding experiments. To meet these requirements, he reviews the work that has been done in this line in the last eight or ten years, pointing out the difficulties of the subject. One difficulty was cleared up, he says, by the observation of Miss Davis and himself that when liquids of suitable character were present in the food mixture, they secured growth when 20 per cent of the diet consisted of nearly nitrogen free lactose, but were unable to do so when the latter was replaced by starch. Obviously an impurity in the lactose furnished a second unknown dietary factor without which growth could not proceed. That led Miss Davis and himself in 1915 to offer the working hypothesis

that an adequate diet during growth must furnish, in addition to the well recognized constituents of the diet—protein, carbohydrate, fats and inorganic constituents of adequate character and amounts—two as yet unidentified dietary factors. One is soluble in water and alcohol and apparently never associated with the lipoids, when these are isolated from the natural foodstuffs; the other is soluble in fats. The latter is extracted from milk, egg yolk, kidney and probably other animal tissues by ether, but is not removed by this solvent from either the seeds or the leaves of the plants. The former is universally present in foodstuffs of vegetable and animal origin, but is absent or nearly so from crystalline sugar, starch and fats, and is present in but small amount in polished rice and probably in those foods derived from the endosperm of seeds by milling processes. Where the reaction of the medium is alkaline, strong heating of foods probably leads to its destruction. Employing this working hypothesis, they have examined the dietary deficiencies of several of the more important natural foodstuffs. Feeding young animals, for example, with maize, they cease to grow and succumb usually in two months. They added various substances like butter fat to furnish the unidentified dietary factor aid; in another group, maize plus a liberal amount of casein; in still another, maize plus a salt mixture. Maize contains a liberal portion of the water soluble. In all cases, the results was substantially the same. These and similar experiments are illustrated by charts and the effects on rats are noted and discussed in the text. They have also carried out a series of experiments to show the minimum amount of several seeds necessary to supply enough water-soluble dietary essential for full development, which are also discussed. Lastly, McCollum discusses the causes of scurvy and beriberi which he considers the results of unsatisfactory adjustments among the well recognized constituents of the diet, rather than to the lack of specific chemical substances. The paper attempts to show, as far as can be done by experiment, the specific dietary properties of natural food and how they may be advantageously combined, also recognizing the difficulties and the need of still greater knowledge of the subject. A varied diet makes for safety but does not insure it, and it remains to be seen whether the results in animals are applicable to human beings. The inadequate diets of man are generally defective to some degree with respect to two or three dietary factors at the same time, and with the increasing dependence on diets of food and manufactured products derived from them, it is probable that the difficulties will increase. The time doubtless will be possible to plan a variety of human dietaries, but only a very general statement as to the safest policy is possible at the present time. "A diet in which the seeds of plants form the principal part will be made more safe by the judicious use of milk and of the leaves and probably also of the tubers of plants. These have peculiar dietary properties which the best chemical talent of today fails to recognize, but which are readily demonstrable by biologic tests."

DUODENAL INFUSION

G. L. McWhorter, Minneapolis (Journal A. M. A., May 12, 1917), reviews the literature of duodenal infusion and says that it has con-

vinced him that the use of the duodenal tube for this purpose in postoperative treatment is a new procedure. The use of the biliary route to the duodenum in cases in which a fistula would ordinarily be made, for the treatment of some pathologic condition of that tract would not increase the dangers of infection, of permanent fistula or of shock from prolonging the operation, but biliary fistula made for duodenal infusion especially in addition to some other operation would decidedly increase the dangers as compared with the use of a method as simple as the passage of a duodenal tube by mouth. This has been used heretofore in medical cases, but the proposal made by McWhorter of using it as a postoperative procedure, or even earlier, he thinks, has its advantages. The tube is of value as soon as it is in the stomach, since the stomach may first be washed to prevent postanesthetic vomiting. The slow infusion avoids irritation due to swallowing, and it may also be used for gavage. It also has the advantage of relaxing the pylorus. McWhorter has been able to demonstrate that the pylorus is patent soon after operations on the intestine. The small soft tube may be passed into the stomach at the time of operation and its introduction may be effected by first passing the tube inside of a stomach tube, then withdrawing the latter. He sums up its advantages as follows: "Infusion through the permanent tube by mouth is desirable in the treatment of postoperative cases, with early nourishment and medication, since it may be instituted at any time without adding to the dangers of operation. In dehydration, acidosis, ileus and especially in the persistent vomiting following gastro-intestinal operations, this method has proved of definite value."

ANESTHESIA ACIDOSIS

The increasing use of chemical methods in surgery as well as in clinical medicine is noticed by W. H. Morriss, New Haven, Conn. (Journal A. M. A., May 12, 1917), who specially notices the determination of the acid base equilibrium the maintenance of which is mainly through the elimination of carbon dioxide by the lungs, the excretion of acid salts by the kidneys and sweat glands, the presence of "buffer" substances in the blood including the bicarbonates, phosphates and probably proteins, and the production of ammonia at the expense of urea. The lungs take a leading part in this regulation. The carbon dioxid which the lungs excrete has acid properties but when in the blood it is neutralized by the excess of alkali, the so-called alkali reserve, which can be estimated indirectly by several methods. An undue collection of acid products in the body is harmful, unless this mechanism acts effectively. The most familiar example of acidosis is that attended with the excretion of acetone and diacetic acid in the urine, with a fruity odor to the breath, and hyperpnea, vomiting and prostration. This type of acidosis is defined more specifically as a ketosis. The specific nature of the toxic substance involved, however, has not been yet recognized in every kind of acidosis. Acidosis has been recognized in the vomiting and diarrhea of infants and children, and the findings indicate a tendency to lessened alkalinity in the blood and tissues. It has been supposed that anesthesia frequently induced an acidosis since acetone was

demonstrable in the urine of patients suffering from persistent postoperative vomiting. Bradner and Reimann reported acetonuria in 61.7 per cent. of postoperative cases. Crile and his associates have emphasized the value of studying a respiratory change, and recommended the examination before giving the anesthetic and have demonstrated a diminution in the alkali reserve in these cases which Morriss' observations confirm. He describes his own method as follows: "A specimen of blood was obtained several hours before operation and another directly after it ended. The blood was collected under liquid petrolatum in small centrifuge tubes containing a few crystals of potassium oxalate. It was centrifugalized immediately, and the plasma drawn off with a pipet. Usually, the analysis was completed at once; but if not, the specimen of plasma was kept on ice in a paraffin-lined tube. The analysis followed the Van Slyke technic and was carried out with the apparatus he described. The plasma was first brought into equilibrium with alveolar air. This was done by blowing through a wash bottle filled with glass beads which removed the moisture; thence the air was conducted into a separating funnel containing the plasma for analysis. The composition of the air thus employed was frequently tested by a simple apparatus for the analysis of alveolar air and blood gas devised by Yandell Henderson, a description of which he will soon publish. It was found that the amount of carbon dioxid in the air used to saturate the plasma varied but slightly, namely, between 5.5 and 6 per cent. After the plasma had been brought into equilibrium with alveolar air, it was introduced in the van Slyke appartus; there, after the addition of acid, the carbon dioxid was liberated by means of a vacuum and measured. The figures in the tables are so calculated as to give the volume of carbon dioxid (reduced to 0 C. and 760 mm.) which 100 c.c. of plasma are capable of binding at 20 C." Observations on the carbon dioxid combining power of the drug before and after various operations and the alkali reserve of the blood under the same conditions are reported in tabulated form and the results discussed. The results of animal experimentations on dogs are also reported and the results of treatment in human cases. His conclusions are stated as follows: 1. The capacity of the plasma for combining with carbon dioxid is decreased after ether and chloroform anesthesia; in other words, one influence of the anesthetic is toward depletion of the alkali reserve. 2. During the first half hour of anesthesia, this factor of safety is notably modified, and the drop is more profound in the case of chloroform than of ether. 3. The initial drop in the alkali reserve is followed by a rebound; from that level there is a gradual decrease until the conclusion of anesthesia. 4. Preliminary administration of sodium bicarbonate increases the alkali reserve, though the most noteworthy effect of this treatment is to lead to higher values for this factor of safety at the conclusion of the anesthetic. 5. The administration of this drug before operation is a rational precautionary measure against postoperative vomiting."

MEDICAL RESEARCH

F. S. Lee, New York, R. M. Pearce, Philadelphia, and W. B. Cannon, Boston, publish their report of the Committee on Medical Research of the Association of American Medical Colleges in the Journal A. M. M. April 14, 1917. The report opens with a statement of the change in medical opinion as regards medicine as a science rather than an art and this raises the general question of medical research in its relation to medical schools. They first analyze the conception of research. In science the man who is satisfied with present knowledge they call the static man while his opposite, the investigator, is never satisfied with present requirements and his aspirations do not end in mere dreaming. The spirit of research fully developed in the individual has a broader outlook and desires a still broader one. Whether a physician shall become a static or dynamic man of science depends largely on the way in which in his student days he has been taught. The responsibility of the instructor is therefore great. The greater volume of original contributions has been made under the influence of the higher educational institutions. This was less appreciated in former years but lately there has been a great change of view. The home of the medical schools will in the future, the committee thinks, be in universities. The question is raised, however, whether they will be the chief seats of medical advance and compete with the special research foundations now coming into existence. They enumerate twenty-six such foundations engaged primarily in medical research, but point out the fact that two-thirds of these exist in universities or are in direct connection with them. There are many advantages in universities for such foundations and especially important are the facilities for starting investigators. There is every reason, therefore, to believe that the medical schools will continue to be the chief promoters of medical advance. There may be still some holding the view that the medical school should be merely a teaching institution, but as such they cannot keep pace with progress, and research encouragement is its duty. The teaching staff must perform both teaching and investigating functions and in the better medical schools of the present time this is the case. Most of the faculty are also engaged partly in teaching, but a few have purely research positions. There are also postgraduate students and others who are primarily practitioners in medicine but who give a portion of their time to investigative work. Undergraduate students are often found who are impelled by one motive or another to investigate the minor problems of interest to them. Honor is due to those practitioners outside who do not allow their ambitions to be quenched by the demands of routine practice, and these are constantly contributing to medical literature. These, however, with increasing facilities and demands seek the university laboratories and hospitals more and more, and such should always be open to capable men. With the raising of standards, it has come about that research is expected more and more of the members of the academic staff. It should be clearly understood that no holder of such a position has performed his full duty to his school unless he investigates; this is as true of the clinical as of the preclinical studies. The great obstacle to reaching the ideal

in this regard is that there are two types of individuals of which there are too many in the medical faculties. One of these is the materially successful practitioner who allows his practice to be the first consideration; the other is the subordinate instructor struggling to acquire a practice, and who holds his scohol position for its salary or for the material benefits which he thinks it may bring him. How far it is advisable for medical schools to establish separate chairs and departments for research only, may be asked. So far as they supplement the work in co-operation with other research activities of the school they are to be welcomed, but not if they monopolize the research spirit and afford excuses for others to refrain from scientific research. Investigation by undergraduates has been encouraged in the past more in Germany than elsewhere, and appreciable contributions to human knowledge have been thus made and the committee favors the encouragement of a research spirit in the medical student. It means more for medical progress and for the benefit of mankind. We find here, they say, that medical schools in America vary largely in this respect, and five years ago only a small percentage actually favored undergraduate research. Though a distinct change has probably occurred since that time, they believe the percentage will still be found small. There is no question, however, that the undergraduate should have opportunities to investigate and that the spirit of research should permeate all medical teaching. It should be kept before the student as his ideal and he should have a wholesome hesitation to accept authority blindly and should be taught to seek the conditions of discovery, so that he will not only keep up with medical progress as a follower, but aid it personally. The objection will be raised that with the overcrowded curriculum there is no time for the student to go outside of his routine studies. The present four years curriculum, they say, should be critically and partially re-examined with a view to the judicious omission of unnecessary matter. There should be no attempt to graduate specialists. Such must acquire their special training in their postgraduate years and they see a danger that the fifth year, which appears now a practical certainty, will fall into routine methods of instruction, but if the curriculum is organized in a rational manner, many of the undergraduates will be able to test their powers as investigators. We have not yet come to realize how great a part the medical school can play in the progress of medical science.

TUBERCULOSIS

N. B. Burns, North Wilmington, Mass., and F. H. Slack, Philip Casleman and Karl Bailey, Boston (Journal A. M. A., May 2, 1917)), have experimented with the application of the complement-fixation test to the diagnosis of tuberculosis. They speak of the results of different workers and the variations that are seen in regard to the estimated value of this test for which Miller and Zinsser of New York claim an accuracy of nearly 100 per cent., using an antigen made up of ground tubercle bacilli in physiologic chlorid of sodium solution which is thus prepared and used: Twenty mg. of the moist tubercle bacillus mass are weighed out, placed in a conical 15 c.c. centrifuge tube, and to it are added 90 mg. of table salt. With a

glass rod, filed to roughness at the end, this paste is ground by hand for about one hour. Distilled water is then added to isotonicity, that is, 10 c.c. to the quantities described above. This is the antigen. Just before using, it is shaken up and the heavier particles are allowed to settle in the course of a few minutes. Except for the removal of these larger elements, the suspension is used as a whole without centrifugation and without filtration. It seemed to them that it would be of interest and value to retest the Miller antigen and with this in some cases Petroff's antigens 1, 2 and 3 which, however, did not give as good results as Miller's antigen. Two series of experiments were made with the Miller antigen, first of specimens of patients with known tuberculosis so as to familiarize the laboratory men with the expected reactions while the second series was to consist of specimens of all grades of the disease from nontuberculous, and from doubtful cases. The last class will provide some indication as to the test for specificity. The blood specimens were taken from patients and employees at the North Reading State Sanatorium. There were seventy-seven known tuberculous patients and the results in the far and moderately advanced are given in tabulated form. The far advanced gave on an average the weakest reaction, while the advanced cases gave a much larger proportion and over one half of the still earlier cases gave a strongly positive record. The evidence seems to favor the belief that the amount of complement-fixing bodies in the blood may measure the patient's resistance against the disease. In a second table, the relation of results to the clinical condition in the seventy-seven cases is also given and analyzed. In the second group of specimens, of all grades of tuberculosis including normal patients, seventy-eight in number, there were three out of nineteen designated as probably nontuberculous and gave a strong reaction and they assume that they may have active lesions not shown by the physical examination. Since the Wassermann test is a routine method in the Boston Health Department Laboratory, it was decided to test all serums submitted for this specific test with the tubercle bacillus antigen. "In this way some light might be thrown on the matter of cross-fixation. A total of 912 such tests was made. Of these 221 were positive and 691 were negative for the Wassermann reaction. Of the 221 positive Wassermann tests, complement fixation for tuberculosis gave 21 positive, 13 moderately positive, 16 delayed negative, and 171 straight negative. Of the 691 negative Wassermann tests, 55 reacted positively for tuberculosis, 35 moderately positive. There were 21 delayed negative and 580 negative reactions. We were unable to obtain clinical histories in many of these cases to confirm the specificity of the tuberculosis reactions; but the evidence seems conclusive that there is no cross-fixation with syphilitic serums." The authors conclude that it appears that the test is pecific for tuberculosis but perhaps the number of tests of nontuberculous cases is too few for a definite statement. It is not to be expected that it will replace the ordinary examination of the sputum, but they believe that it will prove of great value as an aid to diagnosis in cases showing congestive physical signs when there is no positive demonstration of tubercle bacilli in

the sputum. The positive complement-fixation test would be strong evidence, but while a single negative would be inconclusive, several would indicate that active tuberculosis was not present. It will also be useful, they say, to determine whether a clinically arrested case has still an active focus existing.

NOTICE

Any physician having an inclination for Sanitarium work in the line of Nervous Diseases and Habit cases should write DR. L. G. CORBETT, Greenville, S. C., who wishes to retire from this field.



The Winning Bran Food

We believe that Pettijohn's holds the leading place in bran foods.

Its sales have multiplied of late. And largely because physicians endorse it, we think.

It is soft rolled wheat with bran flakes hidden in it. It meets your demand for a natural food, which everybody likes.

It complies with your preference for flake bran, the efficient form.

Pettijohn's Breakfast Food and Pettijohn's Flour supply bran foods in vast variety, and for every meal.

You will find in them exactly what you want.

Pettijohn's

Rolled Wheat with Bran Flakes

Soft, flavory wheat rolled into luscious flakes, hiding 25 per cent of unground bran. A famous breakfast dainty.

Pettijohn's Flour is 75 per cent fine patent flour mixed with 25 per cent tender bran flakes. To be used like Graham flour in any recipe; but better, because the bran is unground.

The Quaker Oats Company

Chicago

(1592)

Dr. Tyler's Private Hospital
For Surgical Patients

TELEPHONE 738 711 *E. NORTH ST.*

GREENVILLE, S. C.

Broadoaks Sanatorium

MORGANTON, N. C.

A private Hospital for the treatment of Nervous and Mental Diseases, Inebriety and Drug Habits. A home for selected Chronic Cases

ISAAC M. TAYLOR, M. D., Supt. and Resident Physician.

If you think of taking a

Post Graduate Course

in New York doctor, The Journal has something interesting to offer.

The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, $2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.
J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.
WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital, Boston, Mass.

OBSTETRICS AND GYNECOLOGY.
ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY
M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.
G. T. TYLER, M. D., Greenville, S. C.
R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.
J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.
E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

THE MEDICAL PROFESSION OF AMERICA MUST SUPPLY ITS QUOTA OF DOCTORS FOR THE ARMY.

In round numbers, there are about 150,000 physicians listed in our medical directories. Deducting from this number 50,000 names of those who are not in practice or are physically incompetent, there are 100,000 doctors that should be available. Of this number the Surgeon General's Office requires 20,000, or one fifth of the active practitioners, as officers in the Medical Reserve Corps of the United States Army.

The unfounded and possibly maliciously circulated reports of the casualties among the medical profession in the Armies abroad have deterred many from applying for commissions. In reality the number killed on the entire Western front from the beginning of the war to June 27th, 1917, a matter of three years, was 195.

The lowest commisssion offered a doctor is First Lieutenant which draws in pay $2,000 a year; Captains receive $2,400 and Major $3,000. The cost of equipment is about $150.00 to $175.00, according to the desires of the individual. As in civil life, some of us are satisfied with a $25.00 suit of clothes while others pay $50.00 and this applies to a medical officer in purchasing his outfit in the way of uniforms, blankets etc.

The individual outlay when once in the service is principally your expenditure for food, or mess as it is called in military circles, and this will average about $25.00 a month, or about $300.00 a year, meaning that a First Lieuten-

ant should have at the end of the year, or to send home to his family or bank, about $1,700.00, a Captain about $2,000.00 and a major at least $2500.-00.

While this information is of interest to those contemplating applying for commissions in the Medical Reserve Corps, the fact remains that in America we have more than a sufficient number of doctors to adequately supply the demand of the Surgeon General's office without hardship to the civilian population.

The need of doctors is not alone for the mobile army but also in Concentration Camps, Evacuation Hospitals, Base Hospitals and on Transports. It is of decided advantage to volunteer your services and receive the benefit of the very necessary training accorded physicians in medical training camps. It is a safe assumption that for those who receive such training and show their aptitude for the service, advancement will be rapid.

Applications for commissions in the Medical Reserve Corps will be found printed in medical journals or will be sent to you by your Local Examining Board or by the Editor of this paper. Apply for your commission now. Your country needs you.

MEDICAL OFFICERS RESERVE CORPS.

The following Physicians and Dentists have been examined by Dr. F. A. Coward, State Board of Health Laboratory, Columbia, S. C., for the Officers Reserve Corps. Most of them have been accepted, a few are disqualified and some of the applications are still pending.

Dr. W. S. McMurray, Allendale, S. C.

Dr. M. H. Wyman, Columbia, S. C.

Dr. W. J. Burdell, Lugoff, S. C.

Dr. S. C. Baker, Sumter, S. C.

Dr. D. L. Bryson, Winnsboro, S. C.

Dr. Lindsay Peters, Columbia, S. C.

Dr. T. M. Moore, Hagood, S. C.

Dr. A. D. Gregg, Society Hill, S. C.

Dr. G. L. Boykin, Lamar, S. C.

Dr. T. W. Huston, Aiken, S. C.

Dr. E. H. Wyman, Aiken, S. C., (Den.)

Dr. F. D. Morer, Newberry, S. C.

Dr. B. H. Baggott, Columbia, S. C.

Dr. J. R. Boling, Columbia, S. C.

Dr. G. C. Pruitt, Calhoun Falls, S. C.

Dr. R. G. Hamilton, Rockton, S. C.

Dr. C. L. Stevens, Campobello, S. C.

Dr. J. L. Ward, Columbia, S. C.

Dr. R. H. McFadden, Chester, S. C.

Dr. J. E. Johnston, St. George, S. C.

Dr. O. W. Nettles, Jordan, S. C.

Dr. E. W. Pressley, Clover, S. C.

Dr. S. G. Love, Chester, S. C.

Dr. R. L. Gardner, Chesterfield, S. C.

Dr. W. L. Linder, Union, S. C.

Dr. G. F. Klugh, Cross Hill, S. C.

Dr. A. T. Beard, Darlington, S. C.

Dr. T. B. Woods, Whitmire, S. C.

Dr. D. R. Blakeley.

Dr. S. R. Green, Orangeburg, S. C. (Col.)

Dr. W. C. Smith, Liberty, S. C.

Dr. J. C. Pearce, Graniteville, S. C.

Dr. W. W. Felder, Sumter, S. C.

Dr. L. M. Griffith, Asheville, N. C.

Dr. J. G. Edwards, Batesburg, S. C.

Dr. D. Morgan, North, S. C.

Dr. L. B. Weathersbee, Batesburg. S. C.

Dr. H. S. Shaw, Fountain Inn, S. C.

Dr. O. A. Alexander, Darlington. S. C.

Dr. R. R. Durham, Columbia, S. C.

Dr. J. B. Setzler, Newberry, S. C.

Dr. James Daniel, Greenville, S. C.

Dr. J. L. Orr, Greenville, S. C.

Dr. Neves, Greenville, S. C.

Dr. B. F. Sloan, Walhalla, S. C.

Dr. W. B. Gentry, Greenville, S. C.
Dr. I. W. Pittmon, Coronaca, S. C.
Dr. A. B. Walker, Baltimore, Md.
Dr. Davis (Dentist) Chester, S. C.
Dr. W. A. Bickley, Newberry, S. C.
Dr. E. W. Barron, Sally, S. C.
Dr. T. R. W. Wilson, Greenville, S. C
Dr. H. H. Harris, Anderson, S. C.
Dr. L. C. Sanders, Anderson, S. C.
Dr. J. T. Coggeshall, Darlington, S. C.
Dr. J. A. Norton, Conway, S. C.
Dr. Cannon, St. Matthews, S. C., (Dentists.)
Dr. M. B. Neill, Clover, S. C.
Dr. L. F. Robinson, Greenville, S. C.
Dr. T. C. Stone, Aiken, S. C.
Dr. Hastings Wyman, Jr., Aiken, S. C.
Dr. Theo. Maddox, Union, S. C.
Dr. C. B. Geiger, Manning, S. C.
Dr. A. P. McElroy, Union, S. C.
Dr. Isadore Schayer, Columbia, S. C.
Dr. F. M. Harvin, Pinewood, S. C.
Dr. W. H. Powe, Greenville, S. C.
Dr. Hamilton, Chester, S. C., (Dentist).
Dr. J. F. Simmons, Greenwood, S. C.
Dr. R. T. Douglass, Winnsboro, S. C.
Dr, Carr, Greenville, S. C., (Dentist).
Dr. Meredith, Wilmington, N. C., (Dentist).
Dr. J. G. Edwards, Edgefield, S. C., (Dentist).
Dr. Lafayett, (Dentist).
Dr. K. L. Able, Lamar, S. C.
Dr. P. J| Johnston, Estill, S. C.
Dr. D. H. Martin, Union, (Dentist).
Dr. Robert R. Pope, Union, S. C., (Dentist).
Dr. W. Yates, Chadbourn, N. C.
Dr. J. W. Parker, Greenville, S. C.
Dr. H. A. Mood, Sumter, S. C.
Dr. A. T. King, Jefferson City, Tenn.
Dr. V. M. Roberts, Blacksburg, S. C.
Dr. H. B. Thomas, Chester, S. C.
Dr. J. S. White, Darlington, S. C.
Dr. W. L. McRae, (Dentist)
Dr. H. A. Pruitt, Anderson, S. C. (Dentist).
Dr. J. T. Jeter, Santue, S. C.
Dr. W. R. Blackmon, Rock Hill, S. C.
Dr. C. C. Horton, Pendleton, S. C.
Dr. J. J. Strauss, Bennettsville, S. C.
Dr. J. T. Dixon, Rock Hill, S. C., (Vet).
Dr. C. B. Simmons.
Dr. E. B. Hammond.
Dr. J. B. Farly.

The Surgeon at Fort Moultrie, Charleston, S. C., has also examined quite a number of applicants, but we are unable at this time to report this list. We hope to do so in the near future.

CORRECTION.

In the July Journal appeared two original articles which by oversight the names of the Authors were omitted. The article on Amoebic Dysentery was by Dr. H. A. Mood, Sumter, S. C., and the article on Oral Infection was by T. E. Moore Sr., D. D. S., Columbia, S. C.

OUR ADVERTISERS.

Most Medical Journals expect some difficulty in keeping up their advertising patronage during the war, but there is no good reason for a marked reduction provided the Physicians increase the efforts to secure and retain the business. We do not often refer to our Advertisers Editorially, but we feel that it is due them especially at this time, that they be given careful consideration.

Our Advertisers, many of them, have given us their business since the first issue of the Journal and we urge every member of the State Association to read carefully the advertising pages each month and if anything found there is in line with the needs of the reader it is but just, we believe, to place their business with those who patronize us.

We have carried for some time food adds of reliable manufacturers and this is a time in which we are all interested in the food problem. We have with us too a considerable number of institutions, hospitals, and colleges. They are among the best in the country and should be so recognized by the owners of this publication.

So Doctor, do not forget to give the advertising pages perusal from month to month. Almost every month discloses one or more new and important ads. and if the habit is not formed of reading the advertising pages carefully each month, some of these ads. will be missed.

KEEP THE SOCIETY GOING

By the time this number reaches our readers the summer will be practically over and plans for the fall and winter meetings of our constituent Societies should be well under way. Such a tremendous responsibility rests upon organized medicine in the conduct of the war that every Medical Society worthy of the name ought to be in the best of running order. In many instances the officers have already been called, faithful Secretaries of years standing and many of the Presidents. It is incumbent upon the Societies to at once provide competent substitutes during the absence of these officers and thus prevent any lagging of the Society interest. The payment of dues should by no means be overlooked now. Every member possible ought to be kept in good standing for the reason given above.

SPARTANBURG COUNTY HOSPITAL.

Early in October the tax payers of Spartanburg County will be called upon to vote for a special levy to build and equip a thoroughly modern County Hospital. The Journal urges every member of the profession in Spartanburg County to leave no stone unturned to the end that the election shall be favorably carried. Many of the Southern States and especially our own, need County Hospitals and a successful issue of the Spartanburg proposition will prove to be a stimulus to other Counties and other States. If every Doctor in Spartanburg County makes up his mind fully to push this matter to a successful conclusion there is not the slightest doubt as to the issue. The time to begin work is NOW.

ORIGINAL ARTICLES

HOSPITAL STANDARDIZATION.

By John G. Bowman, Director American College of Surgeons, Chicago, Ill.

THE PRESIDENT: Gentlemen, we have the pleasure of having with us this afternoon Dr. John G. Bowman, Director American College of Surgeons. Dr. Bowman was for many years President of the University of Iowa, and went from there to the American College of Surgeons. We are glad to have him with us.

DR. JOHN G. BOWMAN: Mr. President and gentlemen: I am glad to meet with you and to tell you briefly what the American College of Surgeons is endeavoring to do; to bring to you some details of its program which promise to effect your individual work and to affect it in such a way, I trust, that the College will merit your good will.

This organization was formed about four years ago. Its purposes are to put an end to unnecessary operating, and to incompetent operating; to take commercialism out of medicine, to make the splendid traditions of the profession come true. To stop fee-splitting has been commonly conceived as the chief object of the American College of Surgeons. As a matter of fact, that object is merely a small part of what the College was organized to do.

With such purposes definitely stated, obviously it becomes the duty of the Regents of the College to admit to Fellowship only such surgeons as are qualified by special training in surgery and by right character. That is fundamental to any success which the College may win. The Regents, further, are compelled to devise an effective test by which they may determine between the competent and incompetent in surgery. Now what in your opinion would be such a test?

It is probably a fair statement to say that eighty per cent of what a surgeon uses in his practice he learns during his internship in a hospital. The question is, then, what does he learn or what should he learn during his internship? In answer to that question you cannot go into the hospital and say "Here is where the training of the surgeon begins, and there is where it ends." There is no such surgical bailiwick in a hospital. If you would discover the training-ground of the surgeon, you will need to discover the entire hospital, its aims, its routine, its mood. The training of the general practitioner is also essential training for the surgeon.

In fulfilment of their trust the Regents finally decided to have made a thorough study of the hospitals of the United States and Canada, and to give ultimately to the public simple and direct information as to what constitutes a creditable hospital; to indicate those hospitals entitled to public support, confidence, and good will. In a broad sense there is no such thing as a private hospital, no matter who owns it. The hospital is a public institution, just as a college is a public

Address before South Carolina Medical Association, Spartanburg, S. C., April 18, 1917.

institution. It is accountable to the public for its procedure.

The American College of Surgeon purposes, during the next ten years or more to center its primary effort upon a standardization of the hospitals of this continent. Let us consider now a few of the points which will be emphasized in this effort. And let me state the first of these by a concrete illustration.

In the operating room of a large hospital recently there was a surgeon, or a man who thought he was a surgeon, who attempted a simple major operation, He made his incision, rapidly grew nervous. A number of visitors watched. He grew more nervous and finally sat down by an open window. The nurse, an unusually competent woman, virtually finished the operation. Time: one hour and twenty minutes.

Similar instances of incompetence are probably within the experience of each of you. Did you ever ask the trustees of your hospital what they propose to do about such an occurance? If you did, you probably listened to an answer somewhat like this: "Our hospital is an open staff hospital. It is none of our business what surgeon operates in the hospital so long as he has a license to practice medicine and surgery in this State. If he is incompetent, that is an affair of the State and of the medical profession." Do you accept this answer? How long do you believe the public will accept this answer?

Let us remember that the hospital asks the public for support and confidence. Does the hospital owe nothing in return by way of guarantee of honest, competent service? Is it not the business of the trustees to exert every power at their command to protect patients against incompetent service? Of one thing I am sure: the time is not far distant when the public will demand such protection and go only where such protection is really offered.

The first effort of the College, then, will be to consider with hospital boards of trustees the responsibilities involved in their positions of trust; to consider what steps, especially in the smaller hospitals, the trustees may take toward sound medical and surgical service to their communities. The problems are not easy to solve and it is not my purpose now to attempt to indicate how they should be solved. It is enough to say that when a doctor has proven himself incompetent, his hospital privileges should thereby terminate.

Closely related to this problem are the laboratory facilities of the hospital. It is true that first-class medical and surgical service are given in some hospitals which are not equipped with laboratories. The doctors in such instances either maintain individual laboratories or maintain them by groups. The more usual practice is, however, that the hospital maintain a laboratory in charge of a competent pathologist and that through this laboratory the physical findings essential in each diagnosis are made. All tissue removed in the operating room is also here examined. The laboratory is at the service of every physician or surgeon entitled to the privileges of the hospital.

Such a laboratory serves its community in a number of ways. First, it is the most economical means to provide adequate laboratory facilities for the hospital staff. Second, it is a most important factor in the training of the interns and assistants of the hospital. The fact is that in hospitals where such facilities are not provided

in the near future it will not be possible to acquire the service of an intern. A medical graduate who serves his internship to-day in a hospital where there is not a first-class laboratory is cheated. Third, a real hospital laboratory in charge of a competent pathologist is a source of constant inspiration to the profession. It is a center through which individuals work out their problems. It is probably the chief force to keep the profession in a given community out of a rut.

In this country we have the native ability and the physical force to accomplish things as great or greater than have ever been accomplished before in the world. Yet, somehow, we seem to maintain a commonplace level. We are not on fire to do great things. Our leading universities to-day send out many of their best young men to teach school at $1,500 a year. These young fellows then proceed "to keep their jobs." I have no objection that a man accepts $1,500 a year and serves in a little town; I do object to the fact that he serves without a magnificent effort to make his little town the school center of the world. He is not on fire to do his particular work better than it has ever been done before him. No such ambition sends the blood to his finger tips. He is content with the commonplace.

The same criticism, in general, applies to the medical profession. In a community where there is no laboratory there is apt to be little scientific initiative. And then what happens is that doctors do to-day the same things which they did fifteen years ago. They fall into the commonplace and are content.

fffIf we agree that no one in a hospital is to be operated upon until absolutely every physical finding has been made which may throw light on the case, then we must agree that a first-class laboratory is essential. The question of the cost of this laboratory and its maintenance is a bugaboo for which there is little real basis. When a given community is really awakened to the meaning of a laboratory for its own protection, the funds for the creation of that laboratory and its maintenance will be forthcoming.

This subject leads us to another phase of the standardization which the College proposes to carry out. That is the matter of case-records. A hospital is a public institution, and as such, should maintain accurate and scientific records of its work. It should take the public into its confidence. In other words, each case cared for in the hospital should be completely recorded. All physical findings made in connection with the case should be part of the case-record. In some of the larger hospitals to-day each surgeon is required to post in the operating room in advance of each operation the diagnosis of his case. That diagnosis becomes part of the case-record. The surgeon is then required to dictate the findings at the operation immediately after the operation and these findings also become part of the case-record.

Such records are a pledge to the public of the integrity of the hospital. People are entitled to know what the results of the medical and surgical work of the hospital are. They are entitled to know, for example, in appendix operations, what percentage of patients recovered and what percentage died or were not relieved. In fact, honest records are the one back-fire of the medical profession to-day through which it can best combat medical sectarianism. Medicine is a science; facts are not disputable.

In my judgment the profession should bring frequently to the public the results of its work in terms which the public may grasp. It should then invite and insist that other groups of men who claim to relieve human illness do the same thing in the same scientific spirit and accuracy of detail.

While we are on this subject let me suggest a further diagnosis of your problem as a profession. You have entrusted to you to-day the care of the school children of this nation. To you also is entrusted the physical welfare and medical protection of our army and navy. What are you doing to take the great mass of people into your confidence and to win their approval of your work in these fields? Have you endeavored to teach every school child in this country the simple facts about bacteriology? If you will make clear to the school children of this country what bacteria are, and their relation to our physical welfare, you will have made effective headway against sectarianism in medical science.

But to come back to this matter of hospital standardization. I should like to avoid the subject of fee-splitting. But that is a subject which cannot be avoided. It is also an evil which apparently will not die before it is killed. You know so well what the practice is that a review of the subject is not here necessary. Its evils are: First, it makes for unnecessary operating; Second, it is the chief cause of incompetent operating; Third, it blackens the entire profession with dishonesty and discredits all of you in the public mind.

The spirit of the American College of Surgeons throughout all of the proposed standardization is one of cooperation. It is of helpfulness. It is one to strengthen the bonds between hospitals and their respective communities. The Regents of the College in their early discussions of these matters decided that they would not consider any hospital the trustees of which would not definitely close their hospital to men who practiced the division of fees.

In nearly a score of States to-day a physician or surgeon found guilty of the practice of fee-splitting may be fined and put in jail and his medical license revoked. The day of fee-splitting is practically a thing of the past and any board of hospital trustees which does not care to stand squarely against this practice is not entitled to any toleration on the part of its community.

Finally, let me say a word about the organization of the College. The College endeavors to be neither exclusive nor autocratic. It enrolls to-day about 3,400 surgeons of the United States and Canada. It has on file between 5,000 and 6,000 applications for Fellowship. Briefly, the method of electing a surgeon to Fellowship is as follows: The candidate makes application for Fellowship on a form provided by the College. This application later comes before a state credentials committee which is elected by the Fellows of that state. The State Credentials Committee returns to the central committee its judgment as to the character, integrity, and scientific training of the candidate. If the report is favorable the candidate is permitted to submit to the College one hundred case-histories, fifty of which are in abstract and fifty of which are complete. The fifty complete histories must be of consecutive major operations for which the candidate was responsible.

Last year about sixty per cent of

those who submitted case-histories failed of approval. Many of these failed because they did not submit proper laboratory findings in connection with their diagnoses. Others failed because even with good physical findings recorded, they showed obviously bad surgical judgment. Many of those who were not admitted were informed that they might submit an additional set of histories later, if in advance they submitted evidence of further training in the specialty of surgery.

DISCUSSION.

By Dr. C. W. Kollock, Charleston, S. C.

Mr. President and gentlemen: Dr. Bowman's address has been one of very great interest to me, because I agree with him in everything he has said. We are due to have an awakening in the matters which he has discussed, and we think perhaps that while we are very up to-date in many respects, and that there is but very little that can improve us, we ought to know that that is the most dangerous time, when our feeling of satisfaction is greatest, and to know, then, that there is always some room for improvement.

I have been, always, a great believer in the ethics, and I can understand how fee-splitting would upset any ethical feeling. I think that the problem is that many men have divided fees before they thought that there was anything bad about it. For instance, I think that men sometimes divide fees or the surgeon has given part of the fee to the practitioner when he thought the practitioner would not get anything, not with the idea of obtaining his patronage, or anything of that sort. But since the matter has been brought so clearly to us, and we can see the evils or the suspicions that might arise, because we can see readily how, if one physician takes his patients always to another one, (which is perfectly correct, if he wishes to do so), but accepts certain privileges and courtesies, that he may lay himself liable to these suspicions; but if the people understand that the physician and the surgeon each collects his fee, and one does not collect for another, the matter will be on a much better basis, and we will all feel better. The profession of medicine should be so high and pure that there should not be any suspicions on this subject, and no patient should think that his doctor is doing anything which is underhanded, and I am sure I voice the sentiments of every man in this room that no one would wish his neighbors or any one else to think he was doing anything underhanded.

In the matter of the hospitals, there is much to be done. Hospitals have been wonderfully improved in the last twenty or thirty years. I can remember the Hospital in which I was an interne, the nurses were those who had been or were being cured of some disease. Most of the nurses were syphilitics. But all these things have been improved. Really, if we must admit it among ourselves, the nurse have taught us to be clean, and we owe them a great deal, but there is much yet to be done.

Another thing: We should be careful about the nurses we have in those hospitals, and the training of them. There are hospitals in this State in which the training is not properly carried out. The nurses do not have the instruction that they should have. This instruction is not given by specialists, and these nurses are not sufficiently educated to enter

these hospitals. A nurse now should at least have a high-school education. This may seem a little unnecessary to some of us, but when we think of the responsibility that they have, they are going into our households, and things of that sort should certainly have attention.

As to their general character, that is taken for granted. I believe the length of time for teaching now is three years. That has been provided by law. These hospitals that are not standardized, their nursese should not be admitted to be examined by the State Board, and in that way we will get better hospitals, and the whole plane of the medical profession is going to be elevated. That is what we have these meetings for: that is what we have men like Dr. Bowman to come and speak to us for, to tell us about the views of others, and not let us be satisfied with ourselves and think that everything we do is absolutely right.

Dr. Robert Wilson, Charleston, S. C.

Mr. President: I certainly enjoyed the talk of Dr. Bowman, and I think after his clear statement of his subject anything from me would be rather weak.

I was interested in the hospital situation, being Dean of the College, and having sought interneships in several hospitals for our graduates. Hospitals have grown, but they take very little interest in the value of internes, not seeing the value of graduate students who can take charge of the laboratory; and I sincerely hope and believe that the visit of Dr. Bowman is going to have a great effect upon the hospital situation in our State, putting us upon the proper plane, from the hospital point of view.

Dr. R. B. Epting, Greenwood, S. C.

Just one point in the Doctor's talk that impressed me: The surgeon taking into consideration the condition of the patient, and the doctor who had nursed him up to the operating table getting compensation.

I have been practicing for a number of years, (I am a general practitioner), and have never accepted a fee or split a fee; but I had one man, (some one had recommended him to the patient) thank me after the operation was over, for sending him the patient. He stated that when the gentleman compensated him for the work he would remember me. I replied that I accepted my compensation only from the patient and not from the surgeon. The man came to me complaining of the high price of the operation, and I requested the surgeon to reduce it some if he could. The surgeon knocked off $50, which I expect he intended giving to me.

By the way, I want to say that that surgeon was not a member of this Association, nor in the State, even.

Dr. A. E. Baker, Charleston, S. C.

I want to offer a word of endorsement of the wholesome truths that the Doctor has brought to us this evening with so much force, and I am especially interested in knowing what the College of Surgeons intend to do in regard to cleaning the profession of any deception and underhand work, and the way they are going to do it I am sure it must be a success. I hope the Doctor will visit every precinct with such truths.

Dr. Bowman: Closes Discussion.

We shall not start with any hospital at all unless the hospital trustees will guarantee from the beginning

that no man is entitled to practice in the hospital medicine or surgery that practices the splitting of fees.

MEDICAL ASPECTS OF THE SOCIAL HYGIENE MOVEMENT.

By Dr. Rachelle S. Yarros, University of Illinois, Chicago, Illinois.

I AM glad to have the opportunity to speak to you on this most important subject. I know how little time the busy physician is in the habit of giving to such matters, and I also realize that there is considerable prejudice still among physicians toward the entire subject of social hygiene. I shall, therefore, try my best to put the subject before you in the fairest possible way, in the hope of making matters clearer and securing your earnest consideration for the subject.

Personally I have been very much interested in the subject of social hygiene for many years. I have watched the movement with great interest. It has developed and assumed new phases year after year. This movement is based on broad, social philosophy which looks forward to perfect relations of men and women, to elimination of disease and unfit offspring, and the bringing forth of a stronger, finer, and healthier race of men.

There is no doubt that the world is greatly indebted to the physician for his contributions toward the treatment and prevention of disease, and now when the science of medicine is developing more and more along preventive lines, there is a greater demand for leadership and work on the part of the physicians, if they are to live up to the high traditions of the profession. I think, therefore, that it is the duty of every physician to inform himself at least on the health aspects of the movement and endeavor to make contributions toward their solution.

A brief outline of the social hygiene movement would seem to me to be appropriate at this point. Dr. Prince Morrow, the pioneer of the movement in America, writes:

"An international congress for the study and prevention of diseases growing out of the social evil, in which every civilized country in the world was represented, was held in Brussels in 1902. The deliberations of this congress crystalized into a conviction that the preventive measures hitherto employed were insufficient, and that the whole question should be studied from a broader standpoint, and with special reference to the social conditions involved in the causation of these diseases. Especial recognition was given to the fact that the moral as well as the medical issues were involved in the problem of prevention, and the congress recommended that societies should be organized in all countries for the study of the best means of every order, moral, social, legislative, as well as medical, to be employed in the prophylaxis of these diseases."

Dr. Morrow, upon his return from Brussels, started the propaganda with a view to organizing societies and educating the public, following the suggestions of the Brussels congress. The first society was organized in New York, of which Dr. Morrow was president, and included among its members some of the most prominent physicians, lawyers, social workers, and business men of that city. If I am not mistaken, Chicago was the

Address before South Carolina Medical Association, Spartanburg, S. C., April 19, 1917.

next in order to organize a social hygiene society, which was also composed of some of our leading citizens. I remember with great interest the first meeting which was held soon after the formation of the Chicago Society, under the auspices of the Chicago Woman's Club, one of the most prominent organizations in the city and in the country, where the subject for discussion was "What Can the Chicago Woman's Club do for the Movement?" It was probably the first time in history when physicians spoke freely of the origin, prevalence, and dangers of venereal disease before a lay audience entirely made up of women. I assure you there was considerable hemming and hawing on the part of the speakers, and a great deal of embarrassment on the part of the audience. Everybody was self-conscious. But the outcome of the meeting was the beginning of a new era everyone present felt that henceforth the truth must be told, and that ignorance on the subject must be relegated to the dark ages.

In the course of the next few years, societies were being rapidly organized in many other cities in this country. It was soon felt that the next step was to co-ordinate the work of the various societies, and with this view in mind, a national society, with Prince Morrow as the first president, was formed in 1910, known as the American Federation for Sex Hygiene. In 1914, this organization and the American Vigilance Association, which had for many years dealt with the moral aspects of social hygiene, merged and formed what is now known as The American Social Hygiene Association. Ever since the formation of the national Association, the social hygiene movement has assumed a greater dignity and significance worthy of its leaders, among whom are such people as ex-President Charles W. Eliot of Harvard, ex-President Abram W. Harris, of Northwestern University, David Starr Jordan, Bishop Walter T. Sumner, Miss Jane Addams, Dr. Hugh Cabot, Dr. Edward L. Keyes, Jr., Dr. William F. Snow, and many others.

Another significant move to my mind was made in 1910, when, at the meeting of the General Federation of Women's Clubs, the membership of which is over two million, and which is well known for its moderate views and its most remarkable work, a department of social hygiene was established, which department has been instrumental in awakening the interest of these many thousands of women in the subject of social hygiene.

The general awakening and the greater interest, both here and abroad, in the social diseases—syphilis and gonorrhoea—no doubt stimulated, indirectly at least, the men in the laboratories who were doing research work with wonderful results. The organism of syphilis was discovered in 1905; the development of the Wassermann reaction in 1907; salvarsan for the treatment of syphilis in 1910; better tests for the diagnosis of gonorrhoea and better methods of treatment.

You all remember, no doubt, the glowing reports which we received in the days when salvarsan was first used. Many enthusiasts went so far as to claim that the dangers of syphilis were at an end, and that there was no need for any social hygiene movement. But, of course, we know better now. Salvarsan is viewed now as one of the important remedies for syphilis, but nothing else. Furthermore, new studies here and abroad brings us information that

many other grave diseases of the spinal cord, blood vessels and heart are of syphilitic origin. Syphilis and its complications are still destroying life, producing suffering, to both guilty and innocent, and threatening the race of man.

As to gonorrhoea, this disease to my mind is even a greater menace as a social disease; first, because of its greater prevalence (20%) ————————————, and second, because of the greater indifference on the part of the lay and professional people toward its ravages, and third, because "while syphilis in its early stages is especially a public danger, gonorrhoea remains a public danger at all times." We know that gonorrhoea is not a simple local disease of "no greater significance than an ordinary cold," for we are now familiar with its general complications, such as gonorrhoeal arthritis and gonorrhoeal endocarditis, in addition to the serious complications of the male organs. But the greater danger, and one that arouses the indignation of fathers, mothers, and guardians of young women, is the fact that gonorrhoea is brought, in most cases, by the young husband to his innocent wife. In the woman a gonorrhoeal infection causes much more destruction in the organs of generation, and is much more difficult to treat than in the male. To illustrate, let me refer to a tragic, yet a typical case, that came under my care while still an interne, twenty-four years ago, which I shall never forget if I live to be a thousand years. It was the first time that I was faced with the fact that gonorrhoea was not confined to men of lower character and no education and to unfortunate women whom we call prostitutes. The shock was great, and it left with me a lasting impression. In fact, it was the beginning of my interest in social hygiene.

The case was one of a young couple of splendid family, of high education, who were in love with each other since early high school days, both college bred; each dreaming and preparing for the great future, when they would marry and be everything to each other. The history on admission of the patient to the hospital was as follows: "I have always been well and strong; never a pain nor ache of any kind. I could row, climb and walk almost as well as my husband (who was, by the way, a great althlete when at college). I have only been married four months. After the first menstrual period, I began to have some difficulty in urination and a little later, pains low down in the pelvis. I got steadily worse, and here I am now, apparently an invalid, in pain most of the time, unable to walk even an ordinary distance." Upon examination I found a large tubal mass on either side of the uterus. She was operated and both tubes were removed, which contained a great deal of pus. Four days later she died of obstruction of the bowels. The poor husband, who I am sure loved her more than he did his own life, suffered tortures. In fact he had a complete breakdown, and recovered only after many months. It was then that I made him tell me how he contracted gonorrhoea. It was when he first went to college at the age of eighteen, only with the vaguest notions as to his sex feelings, without any instruction on the part of his parents, who had taken great pains in instructing him in everything else that pertained to his body and conduct. It was the night of the fraternity banquet, when they all had taken a little more drink than most were accustomed to. He,

in company with many others, in a state of drunkenness was taken to a house of prostitution in the vicinity of the college. It was then that he contracted the disease. In a few days, when a discharge appeared, his feeling of remorse and dread had almost unbalanced him. He then went to the family physician for advice. The old-fashioned doctor smiled, patted him on the back, and told him "not to be a goose," that the danger was very slight, and that it was an experience that happened to many. He gave him some wash, and told him to come back in a few days. The attack was apparently very slight, and he was "discharged cured." "This," he said, "happened many years ago, and I never dreamt of any danger."

I have since come across many similar cases, and so have you no doubt. You have heard many times, and so have I, the cry of despair of the young husband, when informed that his young wife is the victim of gonorrhoea and that the only relief is a serious operation, "Why did not somebody tell me the truth as to this particular danger before now?" You all know that half of the operations performed on women are due to this infection. You all know that half of the cases of sterility are due to this disease, and you are just as familiar as I am with the great suffering and depression that the young wife undergoes when she begins to realize that the joy of motherhood might never be hers. Please don't let anybody convince you that the modern woman, with all her ambition for an independent career or self-expression, is less of a mother at heart. She may feel that at a given time she is not ready to assume the responsibility of motherhood. She has the right to determine in my opinion, the number of children that she can bear and rear. Such women, while they may appear selfish, are in reality not so at all; for in many cases it is because they have come to realize the great responsibility of motherhood, wifehood, and citizenship that they feel they have a right to decide the question. Most women, happily married, sooner or later are ready to take any chances—indeed to risk even life—in order to have a child.

It is still calculated that 20% of all blindness is due to venereal disease. There are hundreds of cases crowding the dispensaries and the offices of private physicians, seeking relief from chronic uterine ailments, which I am sure are some of the by-products of gonorrhoeal infections. And let us not forget that while progress has been made in the treatment of gonorrhoea in the male, the treatment of gonorrhoea in the female still remains very inadequate. You are familiar with many cases, no doubt, where often after months of the most approved local treatment, you finally discharge the patient as cured, and to your disappointment she returns, perhaps after one or two menstrual periods, with a recurrence of the same trouble or with a further extension of the disease.

With these facts before us, we must admit that to shut our eyes to them is dangerous and thoroughly unscientific. To deal with these facts is no simple matter, because we realize that the underlying causes of social diseases are very deep and complex. To deal with them means to deal with one of the most powerful instincts—sex—an instinct which has been thoroughly neglected as far as understanding it is concerned, surrounded by mystery and complete ignorance. On one side this instinct

is spoken of as divine, because it leads to reproduction of life, and on the other side looked down upon as something low—something to be ashamed of. This strong and fundamental instinct of life has been gratified in two ways; first, within marriage, which is considered perfectly legitimate by society, and second, by prostitution, which institution is responsble largely for the prevalence of venereal disease.

It is with the underlying problems of prostitution that we must deal frankly and scientifically, if these diseases are to be eradicated. I shall not deal here with the educational, moral, or economic aspects of this problem, although I am equally interested in them. Some of these I will discuss this evening. At this time I shall confine myself to the medical aspects.

In most parts of Europe, prostitution was legally recognized and dealt with by the authorities through segregation and examination, hoping in that way to limit the spread of venereal disease. It was natural, therefore, for us to feel, when we first began to study these questions in the open, that the methods of the older countries were the ones to follow. The cry came from all sides, "let us, too, recognize the segregated districts, and insist upon the examination of prostitutes." Some of us felt that the results obtained in Europe were unsatisfactory, and it was with great interest that we watched the first vice commisssion officially appointed by the Mayor of Chicago. This Commission was made up of prominent physicians, clergymen, professors, and social workers. It was well known that some of the members of this Commission firmly believed in the control of prostitution by segregation and examination. After a most careful and judicious study of the question involved, the Commission came to a unanimous conclusion that segregation and examination were a failure, and suggested many of the measures of which I shall speak later.

Some years after the report was made, an interesting incident happened in Chicago. Our State's Attorney, due to some political game, suddenly discovered that we still had a segregated district. He ordered it closed, and one evening the citizens of Chicago were horrified by the large number of prostitutes who were rendered homeless by this act. A great many people were particularly disturbed because of the possibility that these women might invade the residence districts. Pressure was brought to bear on the Mayor, who appointed an aldermanic committee to study the question of segregation or no sergregation for Chicago. There was an open discussion for several days, at which time both sides of the problem was presented, and in spite of the fact that many of the aldermen started with the preconceived idea in favor of segregation, they learned so much in the course of the discussion about the dangers of venereal disease, particularly in family life, as well as the scientific and new attitude toward the entire sex problem, that they began to show evidences of change in their position. When they perceived that most of the advocates for segregation had one or another interest in the social evil, their report came out squarely against the policy of segregation.

Vice commissions were soon appointed in other states and cities, as in New York, Minneapolis, Louisville, etc., and in every instance the report was practically unanimous against

segregation. Then came Flexner's most convincing and exhaustive study of prostitution abroad, bringing together a large mass of facts which proved that segregation does not segregate and that the examinations are usually most perfunctory and consequently useless. For instance, in Paris six thousand prostitutes registered in one year, and fifteen thousand were arrested on the streets for soliciting, showing that the clandestine prostitutes make up the largest group and that they cannot possibly be segregated. I myself saw some such clinic as Flexner describes in Paris and in San Francisco, where one hundred or more prostitutes were examined and given a clean bill of health in the course of a very short time, which seemed to me certainly nothing but a farce. And even if at a given examination, the prostitute were free from disease, who could tell just how soon after she would become infected and to how many of her patrons she would communicate the disease before her next examination. Segregation and examination are now practically discredited here and abroad.

What are then some of the newer methods of dealing with the social evil? In the first place, it is now understood that no single remedy is applicable to all its phases. So far as commercialized vice is concerned, the method now regarded as most effective is repression, that is, we expect the state and municipal laws against prostitution to be strictly enforced instead of being treated as a dead letter, and impossible of enforcement. very little headway was made in this direction until certain people hit upon the idea of applying the Iowa Injunction Law in the case of commercialized vice. This law holds the owner and user of property responsible for permitting it to be used for purposes of prostitution. "Any individual citizen may institute proceedings against a house of prostitution, and may enjoin the owner, lessee, and inmates thereof from continuing its use for purposes of prostitution. The procedure is simple, the costs are slight, and the burden is placed upon the onwer of the property to see that his property is not used for such purposes." This legislation has now been adopted in twenty-seven states. No other method ever worked successfully because of the political power wielded by the vice and liquor interests, and because of the many legal obstacles that had to be overcome by any agency that undertook to prosecute the keeper of a house of ill-fame under the general law against nuisances. Moreover, in many cases the officials obstructed such prosecution, while the police corruptly protected the vice centers.

Another part of the modern program is the securing of legislation requiring a medical certificate, stating freedom from venereal disease before a marriage license is obtained. This legislation is already in existence in seven states. Many physicians and lay people have objected seriously to this part of the program, largely because they have not given it due consideration, and because of the misapprehension that we who advocate it believe the measure will solve every problem. To my mind, the most valuable aspect of such legislation is the effect of the educational campaign which has to be carried on in a state in order to pass such a law. Such education calls the attention of the young man to the fact that if he is afflicted with a venereal disease, he is likely to bring it into the family

unless he is absolutely cured. Although he may pay very little attention to it at first, it sinks into his brain, and when the question of marriage actually becomes a concrete thing, the intelligent, conscientious man will no doubt seek to obtain a medical opinion as to his physical state before announcing his marriage. And even if only a small percentage of the young men is influenced by it, it is still worth while, because it decreases to that extent the danger of infection. One of my eminent colleagues, who particularly objected to this part of the social hygiene program, recently became a convert to it as a result of his own sad experience. The daughter of one of his best friends was about to be married. Her fiance came to town and made a social call on the doctor. He discussed various matters with him and when about ready to depart, he fired this question at him: "By the way, doctor, is there any truth in this new fangled idea of the great dangers of infection from gonorrhoea in the marriage relation?" "Because," he said, "I had gonorrhoea a few years ago, for which I was treated and pronounced cured; but of late I have again noticed a little discharge." Whereupon my friend suggested that he had better go at once and obtain an opinion from an expert in this line, "because," he said, "if you are not well, you must not under any conditions marry now. I shall, on my part, do everything to protect you and your interests with the family if postponement is found necessary. I would consider it my duty, however, to inform the family if you do not take my advice." The young man, realizing the seriousness with which the doctor took the question, promised to think the matter over. From the doctor's office, the young man went straight to his fiance and urged her not to wait for the formal wedding, which was to take place within a few days, but suggested going off and being married somewhere quietly, which they did. A few months later, his friend's daughter was found to be infected badly with gonorrhoea, which necessitated the removal of both tubes and ovaries. The young man in question was intelligent and conscientious in a way, but he was not sufficiently educated on the matter of the dangers of gonorrhoea, and thought it safe to take a chance. Besides, he was panic-stricken for fear people would find out, and that perhaps he would lose out in the end. But if this young man had had the necessary education, he would no doubt have secured a medical opinion before actually sending out the wedding announcements.

The watchword among eminent specialists in these diseases is "early diagnosis and treatment," which measures are now considered the most effective for the control of them. This makes it more than ever our duty to take active part in the campaign which will make the Boards of Health and public hospitals establish proper facilities for early diagnosis and treatment. It has been shown on investigation that the facilities for diagnosis and treatment are extremely meagre everywhere, for in most places a back room, a few instruments, and a poor microscope are considered good enough for the diagnosis and treatment of venereal disease. But it is only fair to say that some progress has been made in the last few years. "In 1914 the New York City Health Department examined 59,614 specimens, 75% of which were received from private

physicians. The Massachusetts Department of Health received more than one thousand specimens per month for its Wassermann laboratory, and has extended this service to patients of private physicians. The New York City Department of Health aided, through its advisory clinic, more than three thousand new patients. The Oregon State Board of Health operates a similar department for diagnosis and personal advice. There is now being worked out in the United States a number of valuable experiments in free and pay clinics for venereal disease." The Brooklyn Dispensary, the Boston Dispensary, the Syphilis Clinic of Lakeside Hospital, Cleveland, and others, are already illustrating what work can be done under favorable circumstances. There is a general feeling that we must have not only free day clinics but free evening clinics, and that there must be ample provisions for the treatment of acute cases. Also a great need for follow up work is being felt everywhere. Particularly is this true in dispensary work.

Another measure being advocated is that venereal diseases be classed under the head of reportable, communicable diseases. Eleven states and a number of cities already have such legislation. But the laws have not been enforced to any great extent, because neither the public nor the physician is apparently ready in this country to take such "drastic" measure. "The government of Western Australia by an amendment to its health act which went into effect December 8, 1915, established a public system for the diagnosis and treatment of the venereal diseases which is similar in outline to that established in England. It is a measure based on the principle of controlling the venereal diseases by attending to their treatment until after they have passed the contagious stage. But it goes much farther in this direction than any other act thus far put into force. It does not simply offer facilities for treatment. It operates on the assumption that for the good of the community, the person with venereal disease must submit to treatment until he is free from contagion, and it proposes to see to it that he does this. On developing a venereal disease, a person within three days must go to a qualified practitioner for treatment. If he fails to seek treatment immediately, he will be fined twenty pounds or imprisonment. The physician must report to the health officials the age and sex of the patient and the diagnosis of his condition, but not the name or address. The patient is to return for treatment at least once a month; penalty for failure twenty pounds or imprisonment. If he remains away from treatment for six weeks, the physician under heavy penalty must notify the health authorities, giving this time the patient's name and address, and the health authorities, must bring the patient into court and compel him to have treatment. The patient may change his physician, but on doing this, he must disclose the name of his previous physician, who must be notified by the second physician that the patient is now under treatment by the latter. Treatment must be continued until the patient can obtain a satisfactory certificate of cure. Penalty for failure fifty pounds or imprisonment. The Health Boards have authority to apprehend any persons suspected of having venereal disease which is not being treated, and to compel him to submit to examination by qualified physicians

and to obtain a certificate of health, or to submit to treatment until such certificate can be obtained."

I quote this from a group of very significant editorials, which recently appeared in the American Medical Association Journal, dealing with the venereal disease problem in other countries, and which I would urge you all to read, if you have not yet done so. Some of these editorials deal particularly with the situation in England, and give a splendid summary of the report of the Royal Commission, which was appointed in 1913. After two years of study the Commission made its report. "It examined 85 expert witnesses, whom it asked 22,996 questions. It has as witnesses men who could speak authoritatively on the various topics under discussion, including well known continental authorities on venereal disease." This report, too, came to the conclusion that registration and examination of prostitutes were ineffective as a sanitary measure. "It recommends against compulsory notification of venereal disease at present. It urges the importance of education as to the seriousness of venereal diseases and the dangers of their transmission. It recommends the encouragement of well considered efforts for inculcating sexual restraint. It puts its greatest emphasis, however, on the therapeutic attack on syphilis, and by its recommendations indicates its opinion that in this lies the hope of the sanitary control of the plague." The practical way in which the government of England is dealing with this report is worthy of our greatest attention. "The local government board July 12th, 1916, puts in operation in England and Wales a system of state provisions for the diagnosis and treatment of venereal disease. The essential purpose of the order is universal opportunity for prompt diagnosis and treatment of venereal disease. The cost of this is to be met to the extent of 75% from the Imperial Treasury and only 25% from the government funds. Existing institutions are to be improved, so that they can be utilized for this work, and new institutions are to be avoided as far as possible. The venereal clinics are to be a part of the general clinics, and every effort is to be made to relieve this scheme of the stigma of venereal disease."

The program as here outlined still meets with considerable opposition from various elements of the public, largely based on antiquated notions of propriety and misunderstanding. But surely it is not necessary to dwell before a scientific medical body upon the absurdity of conventional fear of candid discussions of questions so vital to physical and mental health. On the whole, we have reason to congratulate ourselves on the progress social hygiene has made in the United States. In Europe, of late and on account of the war conditions, the awakening of the medical profession as well as of the government agencies, has resulted in extraordinary and vigorous efforts toward the control of venereal disease. We cannot afford to lag behind Europe, and the medical profession is eminently fitted to assume the leadership, in regard at least to the medical and sanitary aspects of this great problem.

DISCUSSION.

DR. H. R. BLACK, SPARTANBURG.

Mr. President: I have discussed this subject time and time again before Y. M. C. A's., before different bodies, I have heard it discussed again and again, and have been reading

about it for many years, and I want to congratulate the Doctor—a woman who has the nerve to come before this body of doctors and tell them the story better than I have ever heard it told. I do wish that she could tell this story to every mother and to every daughter, not only in Spartanburg City, but to every mother throughout this broad land of ours. Gonorrhoea is more far-reaching than any other disease in this country. Every surgeon who has applied the knife knows that it is a fact, and I congratulate you, Doctor, upon your most excellent presentation of the subject. I am glad that you have come to Spartanburg, and I hope that you will stay here and help us to eradicate the disease, not only so prevalent in Spartanburg, but in this country everywhere. I want to once more congratulate you and to thank you for coming to Spartanburg.

DR. W. R. BARRON, COLUMBIA.

I specialize in urological work, and therefore come in contact with venereal disease. I am not connected with any clinic. We haven't a free clinic in Columbia, and do not, therefore, see this class of people, but fully 50 to 60 per cent. of the men who have it have contracted it from other women of the city.

If we jump in indiscriminately and abolish these houses we are not reaching the solution of the evil. I presume the first thing we should do is to sweep the front yard, and then get the backyards cleaned up. These women are much greater menaces than a prostitute is.

I am heartily in favor of doing anything that will eradicate venereal disease.

DR. KOLLOCK, CHARLESTON.

Mr. President: Every one will agree with me that the man who attempts to argue a point with a woman, or who even speaks, or attempts to speak in her presence, shows a considerable bravado, if nothing more; but as I have arrived at the time of life when King Solomon wrote the Proverbs and David wrote the Psalms, perhaps I may be excused for saying a few words. The time has passed when any man has the right to have gonorrhoea. If a man runs amuck and shoots several people on the streets here he is arrested. A few people who are unfortunate enough to be shot may die, or not. Nothing more is done; no one else is hurt. If we have a case of smallpox, measles, yellow fever, or cholorea, it is immediately quarantined. The law requires those people to be shut up, to prevent the spread of the disease; yet one case of gonorrhoea I venture to say will do more harm than any other case of disease left unquarantined, that I have mentioned. If a man becomes infected with gonorrhoea, he should be fined and shut up and quarantined until he is again safe. I admit that that is a radical law. It cannot be enforced now. I look to the enforcement of that law in time to come.

Perhaps five or six years ago I advocated to this Association that every man about to marry undergo this examination and be pronounced in proper condition for that state; so that if the man who has gonorrhoea is reported and fined, (they are like the diver that goes under—he is bound to come up later), and so the man with gonorrhoea has got to show up at some time; therefore, he can be tagged.

DR. COWARD, COLUMBIA.

Mr. President and gentlemen: Unlike Dr, Kollock, I have not reached the age of writing biblical lore, but I wish to make this statement: I think it is one of the most dramatic and impressive things I have ever been through—that a woman has come here, as Dr. Kollock said, and talked to us in this way. I think if many more women get the vote the question will be on the segregation of men and not of women.

I move that Dr. Yarro's address be published in the lay press, as soon as it has been corrected from the stenographer's notes, and that we give her a rising vote of thanks.

Motion carried.

DR. H. H. WYMAN, COLUMBIA.

Mr. Chairman, as you all know, this is a very near subject to me. I have been studying the subject for two years, and it is very gratifying to have these gentlemen say something about it. The difference is Dr. Yarros and I had the same facts, but it is the way in which she presented them. I would be glad to get off the committee and have some man appointed that could stir up the people. Dr. Yarros brought out everything—clean bill of health to marry, the abolishing of prostitutes—all these things together will do away with this thing. We ought to recommend something that is extreme, to invite the attention of the House of Delegates to this main issue.

I am delighted, Doctor, at your reception.

MINUTES

MINUTES OF THE SCIENTIFIC SESSION.

The Scientific Session of the South Carolina Medical Society was called to order at 10:30 Wednesday morning, April 18, 1917, at 10:30 o'clock. Dr. Curran B. Earle, the President, presided over the meeting and called it to order.

Prayer by Rev. J. W. Frazier, Pastor Central Methodist Church, as follows:

Our Heavenly Father, the God of all Truth, of all light, of all knowledge, we delight to honor thee as we come together at this time, realizing that all approximations at truth mean a closer touch with thee; the more we know the world, the ways of life, the closer we draw to the source of all life, and of all goodness.

We thank thee, Lord of Life, for thy various manifestations made through man. At this time we especially thank thee for the merciful ministry of suffering that has been wrought through thy children and through human agencies. We bless thee, oh Divine Healer, for the healing of thy children through the men whom thou hast inspired to do this work, to combat disease through search and research. Thou hast given us the various antidotes.

Teach us, oh Lord, that we may look to Thee in all discoveries, and in all things, and acknowledge thy supremacy. Heal the various ills to which our human flesh is heir. Lord,

make us recognize that in laboring among thy children we are laboring for thee, for as much as an act of mercy is done to the least of thy children it is done unto the. Teach us to know the sacredness of all the so-called secular work; to know that thou art the God not only of spiritual laws but of physiology as well. Thou didst make this body of ours with its wonderous mechanism, and all knowledge of its mysteries is given us, that so much more may we know the workings of thee, dear Lord, through this body, among men.

Let whatever is done in this body here be done for the good of men. We ask this in the name of Him, the Great Physician, Christ Jesus our Lord.

Amen.

THE PRESIDENT: We will have the Address of Welcome by Dr. J. E. Edwards, President of the Spartanburg County Medical Society.

DR. EDWARDS.

Mr. President, ladies and gentlemen: The united medical profession of Spartanburg extends to you a most cordial welcome. We are glad to have with us so many doctors and learned physicians of our State. We are glad to welcome the physicians from the other States in our midst.

We know it was Homer who wrote the epic to the soldier, and Virgil who wrote the epic to the sailor, and Ian McLaren who wrote the epic to the old school, but the modern, scientific doctor, that song is still unsung. The poet has yet to be born who will do justice to the scientific doctor.

Gentlemen, I welcome you again in behalf of the Spartanburg Medical Society. I hope that you will have a good time here. I hope that you will notice our educational advantages, our industrial facilities, our hospital advantages. We are striving now for one large, general hospital in which to take care of the poor and needy.

We thank you for coming to have your meeting among us, and we hope it will not be so long before you will come back to us.

Address of welcome by Mr. Brown, President of the Chamber of Commerce:

Mr. President, ladies and gentlemen: It is with a great deal of pleasure that Spartanburg, through its chamber of commerce and through its city officials welcomes you doctors here to-day. I am supposed to take the place of Mr. Floyd, our Mayor, who is also an undertaker; and he asks me to extend to you the sincere regret that he was not able to be here to-day. He said that you were his best friends. He said that he felt, further, if he made enemies of you, he was liable to starve to death!

Coming from another profession, as I do, Mr. Edwards decided that probably I was the next man from a class that was affected by the medical profession, because you know we get to wind up all the estates which you gentlemen so kindly create for us to wind up at various times.

Sincerely, we are glad to have you here. We realize that the medical profession is one of the greatest professions that there is. We realize that you are doing a great work, and while the doctors have been sung of in song, and talked of in story in times past—the old-fashioned doctor—yet, as Doctor Edwards says, the epic of the new doctor has not been written. The epic of the new doctor

does not need to be written. The epic of the new doctor stands out before us every day. Every time we pick up a paper or magazine we learn of the remarkable discoveries he has made for the cure of diseases, and we learn of the wonderful things that he has done towards producing healthful conditions out of desolate places.

We are glad, indeed, to welcome a crowd of distinguished men in Spartanburg. We are glad to take care of you, and we hope that you will find while you are here as much pleasure in being among us as we have found in having you.

Again I desire to thank you for coming, and to welcome you among us most heartily.

THE PRESIDENT.

In behalf of the South Carolina Medical Association I accept your charming hospitality. For the third time within a generation the South Carolina Medical Association has met in Spartanburg. We have seen the wonderful advances that your city has undergone; we have enjoyed before, your cordial entertainment, and I warn you now that if you don't want the South Carolina Medical Association to come back to Spartanburg, don't invite us, because we will surely come if you do.

I know we shall enjoy our stay here with you and have a most charming visit to your town.

Thank you.

DR. C. W. KOLLOCK, CHARLESTON.

I believe it has been contemplated by the Committee of Arrangements that a trip should be taken to Cedar Springs, the school for the blind and deaf, and for some reason it was given up. A number of members of the Association have been out there and have been exceedingly interested in what was being done. I doubt if but very few here realize the work being done there. I have very little idea of the scope of this place, and I have been in this work for thirty years.

I would move that the Association adjourn at five, or five-thirty and make a visit to this school. It is of the greatest importance that the men of this Association should visit this school, because I think very few have any idea of the good work being done there, and the importance of that work. It is very interesting, to begin with. And then again, we should take into consideration that these children who are deaf, dumb and blind are being taught, not only, perhaps, to speak and to amuse themselves, but further, they are being made producers, which, if they were allowed to remain in the condition they are in, they would not be.

This country is now paying a number of millions of dollars annually for the support of blind people, one-fourth of whom are blind from one cause—a cause that should have been prevented, and a cause that should have been cured when it started—I refer to ophthalmia neonatorum. Therefore, we should visit in this place, and we should therefore be in a better position to insist upon our representatives giving it good support. I therefore move that this Association adjourn at 5:30 and visit Cedar Springs.

DR. EDWARDS: We would be very glad if you would visit Cedar Springs. It is a very interesting place; but I thought on account of so much business coming up you would

not have time to go there. It will take only 10 or 15 minutes to go.

Motion put, seconded and carried.

THE PRESIDENT: Gentlemen, Doctor Robert Wilson of Charleston has an announcement to make.

DR. WILSON: Mr. President, in behalf of the State Board of Health I wish to read you a list of the cities of the State which have endowed beds at the South Carolina Sanitarium for the Treatment of Tuberculosis. The money is now available, and if it is not used it will revert back to the cities. I know you are all interested in the success of this sanitarium, so we should see that some worthy person who needs this treatment is not overlooked.

I hope that each of you, when he goes home, will look up some poor person who is unable to go to the sanitarium, and see that he has the benefit of these funds. We had 500 cases of tuberculosis reported to the office of State Board of Health in 1915. Out of this number 200 died! The following is the list of endowed beds at the South Carolina Sanitorium. The money has been appropriated and is now in the County and City Treasurer's hands:

Counties—Abbeville, Chester, Chesterfield, Clarendon, Colleton, Florence, Georgetown, Kershaw, Orangeburg, Sumter, Union, Williamsburg, Charleston, Anderson, Aiken.

Cities—Columbia, Charleston, Newberry, Laurens, Darlington, Beaufort, Georgetown, Orangeburg, Bennettsville, Camden, Greenwood, Abbeville, Sumter, Anderson.

Pacific Cotton Mills. (Free bed maintained now.)

We have the co-operation of the Masons, Woodmen of the World and Knights of Phythias.

In addition the following Cotton Mills: Abbeville Mills, Lancaster Cotton Mills, Newberry Mills, Panola Mills, Greenwood Cotton Mill, (Mr. Self, Pres.), Grendel Cotton Mill (A. F. McKissick, Pres.)

DR. S. C. BAKER: It is very hard to get them to send there sufficiently early. The incipient cases sohuld be sent on.

DR. WILSON: Our desire is to have only early cases. We find, however, that it is impossible to insist upon them, and I do not believe a patient will be turned down because it does not happen to be a very early case. We want to treat only the early cases. You can do more good, I am sure, by sending some very early case, (and I think we all find those cases), than by sending a later case; still, if your case is not early enough to be called incipient, it will not be refused, I am sure.

DR. TIMMERMAN: Is it absolutely free?

DR. WILSON: Absolutely free.

DR. TIMMERMAN: But only to the people from those counties that you read?

DR. WILSON: Oh yes. The recipient, of course, must live in the county —one of those counties I have read. A certain sum of money has been appropriated.

We have opened the female ward, and it is doing a great work, but it depends upon the Association of the State to make it the success it should be.

DR. JOHNSTON, CHARLESTON.

Mr. President: I beg to offer the following resolutions, and ask that the objections be taken up seriatim and noted, unless there is some objection.

(Resolutions published in June Journal).

DR. ROSS: I move that the resolution be adopted.

DR. H. L. SHAW: I would move to make that one-third instead of one-half. I thought perhaps these gentlemen who had looked into this matter carefully for weeks, maybe, knew that one-third was about right, and I understand a man taking service there has the rank of Lieutenant, with a salary of $2,000. per annum. I think that is a fair compensation for any young man who takes service. I think the experience is worth a great deal to him. I think, also, the prestige he will have after having been in service a few years is worth a great deal to him.

DR. JOHNSON: We thought that the man staying behind should do the work for him as well as he could. We first thought they should not take any fees, but there is a certain amount of work in it, and we think it proper that the fees shall be split.

DR. ROSS: I do not believe that all the men who have to qualify for this service will be young men, and it is possible that many of us who have dependents on us may be called to the colors. A young man has, also, nothing to leave behind. I think it should be one-half. I do not know but what it would be a good thing to turn it all over to him.

DR. LANCASTER, SPARTANBURG.

Mr. President: If I do go away into service, the crowd that I leave here I would like to see be honest and do the thing we promise, and I, for one, if I do not have to go away, if you say all, I will give it to the scoundrel. (Laughter).

If you say $2,000. that will be more than many of them are now making. Now, let's do the honest thing and not pass a resolution that you are not going to carry out.

Gentlemen, this is a matter of going to the defence of your country, and if you say you are going to divide one-half, or one-third, divide that, and don't come up and lie about it.

DR. RICHARDSON, SUMTER.

Mr. President: For a good many years, as a country practitioner, I find that about one-half my country practice is about what it takes to keep up my automobile, leaving out other expenses, and I think the country doctor who is making $2,500. per annum is making more than the average, and if we give half we give more than the upkeep of the machine and incidental expenses, and I think one-third will be sufficient.

DR. LANCASTER: I move to substitute the minority report, and give it to them.

THE PRESIDENT: It is moved that "one-third" be substituted instead of "one-half;" Dr. Ross, will you accept the amendment?

DR. ROSS, Anderson: I might as well.

THE PRESIDENT: The motion is that this resolution be adopted, substituting "one-third" for "one-half;" are you ready for the question?

DR. JOHNSON: One-half, I think it should be. If a man is making more than he is making at home, that is giving a chance to every one to go. It isn't simply the young men who have to go, and many are giving up a great deal, and they should be compensated for it, and the fact that they have given up their little bit of practice makes it certain that when they come back they will have nothing, absolutely, to depend upon. A man, after he begins practicing, does not begin to accumulate anything for the

first two or three months, and I have recently seen a young fellow just returned from the border who tells me he has not yet gotten back to where he was before. He is doing work, and is accumulating indebtedness, but at the present time he is having a hard time getting along, because he had nothing to fall back upon.

DR. KLUGH, Cross Hill: I am going to state that the one who stays at home is going to have about as hard a time as the man that is going. We cannot figure on normal times. 1914 was an example, just after the war broke out, and I would be glad for the gentlemen to bear that in mind.

DR. WALLACE, Easley: I am a member of the reserve corps. I have not been able to do much practice, because I have not been in the place very long, but I should think one-third would be plenty to give a man for going to the front, because $2,000. is more than I am making right now, and I do not know how much I may get in the future, and I think it should be one-third, if not less.

DR. SAUNDERS: How long is this to be?

THE PRESIDENT: Until the close of the war.

DR. SAUNDERS, Anderson: I was talking to a man not long ago, and he told me that in Canada they charged no soldier's family anything there, treating them all free of charge; and if this is done here at home—quite a number of families left here at home are treated absolutely free—the man who stays at home will have to root; so I think a thing of that kind would be rather hard, should we have a ruling of that kind.

Motion put, seconded and carried.

Section two read and adopted.

Third section read.

DR. TIMMERMAN, Batesburg: When a patient comes, it seems you should learn the one who last attended him, because sometimes they do not get the regular doctor. Suppose a fellow would not want the fellow who volunteered, but took him because he could not help himself?

DR. SHELDON, Liberty: In my part of the country many people use all the doctors, and it is hard to say who that man's physician is. Now, in my little town there are people who have been treated by some of the older doctors for years. Possibly one of the new men who has just come there is called in and treats him for a short time; it is hard to tell who is the physician in a case like that.

DR. SHAW, Fountain Inn: What Dr. Sheldon has said there is very true, in my community. We cannot make any laws here that will meet every individual. This is about as good as we can put it. A man that is perfectly honest will try very hard not to have these differences occur.

Third section adopted.

Telegram of invitation and greetings read by the Secretary, from the North Carolina Medical Society.

DR. COWARD: I move that Dr. Hines be instructed to attend the meeting, the expenses to be borne by this Society.

Motion carried.

THE SECRETARY: Mr. President, this concludes the program, and I feel that we ought to thank the citizens of Spartanburg and the Spartanburg Medical Society for our entertainment. There has been a growing sentiment in the Society that all entertainments should be cut down greatly or eliminated altogether, in order that we might get right down to business. That sentiment has been growing for years, and the President and I felt

that we ought to present that matter to the Spartanburg people. We have been over here and conferred with them several times during the year, knowing of the high character of the profession in South Carolina and the desire of this City to entertain us as they have done many times in the past. This City has labored under great restraint, knowing these things, but they have met the situation nobly, and, I may add, bravely. They have responded to our every wish in this regard. They have been extremely careful, not by word or deed, so far as I have been able to see, to offend this growing sentiment of the Association.

Our programs are too long. We have got to cut them down, and will cut them down, I think, as all other states have done. So if there is any way in which we could express our appreciation a little differently, from the simple formal resolutions generally offered, I wish that we could express it now. I am going to ask you to rise now and express it to that extent, and in any other way that any individual may see fit to. I wish to add, also, the Institution for the Deaf, Dumb and Blind, Converse College, the Hotel Management, the Press, the citizens of Spartanburg, and the members of the entertainment committee, as well as the Spartanburg Chamber of Commerce and their President.

DR. COWARD: I wish to amend that by asking that we also give a vote of thanks to our retiring President, for his uniform courtesy and ability in handling the meeting.

Motion put, seconded and carried.

DR. SHAW: And, furthermore, the same thanks to the Committee who have completed the report and have turned over this monument of Dr.



Wheat
Steam Exploded

Puffed Wheat is whole wheat, in which each food cell is blasted by steam explosion. In Prof. Anderson's process, over 100 million steam explosions occur in every kernel.

The grains are puffed to bubbles, eight times normal size. They are flaky, thin and crisp.

Thus whole grains are made wholly digestible. All the food granules are broken. Ordinary cooking doesn't break half of them.

By every standard, Puffed Wheat and Puffed Rice are the greatest of whole-grain food. Here every element is made available, and in a food confection.

The Quaker Oats Company
Chicago

(1654)

Puffed Wheat **Puffed Rice**
and Corn Puffs
Each 15c Except in Far West

Norwood's. The thanks of this Society are extended to the Committee for their completed work.

THE PRESIDENT: I have great pleasure in presenting that motion, Dr. Shaw. Dr. Coward and his fellow workers have worked faithfully.

Motion seconded and carried.

THE PRESIDENT: Is there any business to come before this house?

There being no further business, Dr. Burdell, will you and Dr. Coward present the President-Elect?

(Applause.)

Dr. McLeod, it gives me a great deal of pleasure to turn over the duties and responsibilities of the President's office to you, sir. You have been complimented in a most unusual manner by this Association. One of the few times in its history that a member of this Association has been unanimously elected for the honor that is to be bestowed upon you, now.

I have had the opportunity of being in your district during the past year and seeing the tremendous influence for good that you have in your section of the State, and, through that section, the entire State.

I now turn over to you, Dr. McLeod, the duties of the President's office and know that to no worthier member of the Society could this honor be bestowed upon.

DR. McLEOD: Dr. Earle, and gentlemen: I thank you for this expression of your good-will. Dr. Earle has given so fully of his time and labor that I regret that I am so situated I cannot even, in that manner, emulate his splendid example.

I hope and believe that I have the entire co-operation and support of the Medical Association of South Carolina, and I promise you that I will do the best I can.

(Applause).

DR. PORCHER: I move that we adjourn.

Motion seconded and carried.

SOCIETY REPORTS

CHESTERFIELD.

The Chesterfield County Medical Society was held in Chesterfield, S. C., Tuesday, June 12th, 1917 regarding the mobilization of the Medical Profession for war. The matter was taken up and thoroughly discussed and the Secretary was directed to report as follows:

Chesterfield has a very large area which in sections is thinly settled, there are about thirty thousand people in the County, and in the County are eighteen physicians in active practice, two of whom have already volunteered for service in the Medical Reserve Corps of the U. S. A. With the exception of one or two all come within the specified age, several of the others are physically unfit. Not more than one or two physicians can be spared from their localities.

Drs. F. B. Saunders and R. L. Gardner have already passed examinations for appointment in the Medical Reserve.

Robert L. Gardner,
Sec. and Treas.

NEWBERRY.

The regular meeting of the Newberry County Medical Society of South Carolina was held in City Council Chambers, Friday afternoon, July 13th, with twenty physicians present. The Secretary read a letter from Dr. Rupert Blue, Pres. of A. M. A., asking that "The County Society determine the number of physicians within its jurisdiction who are under fifty-five years of age and who of these are physically and professionally qualified for service in Medical Reserve Corps, also how many and who could be spared from their respective locations, and report to the Secretary of State Medical Association and the Secretary of A. M. A."

After some discussion, a motion was made and carried that the president, vice-president and secretary of the Society constitute a committee to comply with the request in so far as is practically, and forward the report.

The society was also asked to take action looking to safe-guard of the personal interests of the physicians who may be called into active service in the United States Army. It was moved and carried that the following resolutions adopted by the South Carolina Medical Association, be indorsed by this Society. "Resolved that the South Carolina Medical Association recognize the patriotism of those members of the Medical profession resident in South Carolina who volunteer for the service of the United States Government, and in appreciation of this we recommend should these members of the profession be called into active service the doctors who shall attend their patients should turn over one-third of the fees collected from such patients to the physicians in active service or to his family.

Dr. J. M. Kibler, Pres.
Dr. J. W. Setzler, Sec.

BOOK REVIEW

HOSPITAL OF THE PROTESTANT EPISCOPAL CHURCH IN PHILADELPHIA.—Medical and Surgical Reports of the Episcopal Hospital. Volume IV. Philadelphia Press of Wm. J. Dornan. 1916.

The history of the Episcopal Hospital has been splendidly portrayed by Morrison.

Doctor Belk has written a tribute to John Ashhurst, Jr. The Statistical study of all Opthalmological cases admitted to the Hospital is urged by Boone.

One of the most interesting articles is by Dr. Ashhurst, Surgeon to the Hospital, on Abscess of the Lung.

A splendid report of end results of fractures of the forearm has been presented by Longaker. The author of this article advocates a special fracture clinic for free patients in the Hospital and commends the work of the American Surgical Association in the treatment of fractures. This report has been well bound and printed and the illustrations are good. Such a report is not within the means of the average hospital, but in this case is provided for by a special donation and is an authorative volume.

THE PRACTICAL MEDICINE SERIES.—Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the General Editorial Charge of Charles L. Mix, A. M., M. D. Prefessor of Physical Diagnosis in the Northwestern University Medical School. Volume III. The Eye, Ear, Nose and Throat. Edited by Casey A. Wood, C. M., M. D., D. C. L., Albert H. Andrews, M. D., George E. Shambaugh, M. D. Series 1917. Chicago The Year Book Publishers, 608 South Dearborn Street.

THE MEDICAL CLINICS OF NORTH AMERICA.—July, 1917.

This is Volume I, Number One, of the Medical Clinics of North America and begins with the Clinics at the John Hopkins Hospital. The following are the contributions and contents:

Clinics of Dr. Lewellys F. Barker, Johns Hopkins Hospital.

Hodgkin's Disease with Extensive Skin Eruption 1
Postural Albuminuria 21
Diabetes Associated with Disturbances of the External Secretion of the Pancreas in a Syphilitic..... 33

Clinic of Dr. Lewellys F. Baker, Johns Hopkins Hospital.

Meningitis of Unknown Etology, Probably Meningococcal 47
Clinic on 2 cases of Fibrillation of of Muscular Tissue 73
Case 1. Atrial Fibrillation in Mitral Stenosis and Mitral Inssufficiency 73
Case II. Progressive (Central) Muscular Atrophy (Vulpian-Bernhardt Subvariety of the Aran-Duchenne Type) 89

Clinic of Dr. Herman O. Mosenthal, Johns Hopkins Hospital.

Essential Hypertension 101
The Dietetic Treatment of Diabetes Mellitus 119

Clinic of Dr. Thomas B. Futcher, Johns Hopkins Hospital.

Acromegaly 131
Combined Scleroderma, Raynaud's Disease, and Chronic Arthritis..... 145

Clinic of Dr. Louis Hamman, Johns Hopkins Hospital.

Two Unusual Cases 177
Case 1. Dermoid Cyst of the Mediastinum 177
Case II. Milroy's Disease 182

Clinic of Dr. Thomas R. Brown, Johns Hopkins Hospital.

Some Gastro-Intestinal Notes 185
1. The Cause of the Symptoms of Gastroptosis. The Significance of a Congenitally Fixed High Duodenum and of Duodenal or Pyloric Adhesions, and the Value of Pyloroplasty in the Treatment of such Cases 185
2. Visceroptosis and Chronic Appen- Philadelphia and London: W. B. dicitis 189
3. The Medical After-Care of Surgical Patients after Abdominal Operations 191

This is an attempt to present stenographers reports and the work done in the greatest Medical centers of North America along the lines of the Murphy Clinics of Chicago. We approve the development of this idea.

Published Bi-Monthly By W. B. Saunders Company Phil. Price $10.00 per year.

THE SURGICAL CLINICS OF CHICAGO VOLUME I NUMBER III (June 1917) —The Surgical Clinics of Chicago Volume I Number III (June 1917). Octavo of 231 pages, 70 illustrations Saunders Company. 1917. Published Bi-Monthly: Price per year: Paper $10.00: Cloth $14.00.

This is a most excellent number. Among the interesting articles and clinics we note the following:

Clinic of Dr. Arthur Dean Bevan, Presbyterian Hospital.

Pulsion Diverticulum of the Esphagus—Cure by the Sippy—Bevan Operation 449
Removal of Murphy Button from Stomach Two and One-Half Years After Gastroenterostomy for Duodenal Ulcer 459
Hernia of the Diaphragm 463
Carcinoma of the Jejunum; 5 Cases of Chronic Intestinal Obstruction Due to Lesions Located Near the Duodenojejunal Lunction 471

Clinic of Dr. E. Wyllys Andrews, Mercy Hospital.

Varicocele: New, Old and Combined Methods of Operative Relief 505

Clinic of Dr. Vernon C. David, Presbyterian Hospital.

Local Anesthesia for Hemorrhoidectomy 543

Clinics of Dr. Thomas J. Watkins, St. County Hospital.

Perineorrhaphy 595

Clinic of Dr. Charles A. Parker, Cook County Hospital.

The Treatment of Burns with Special Reference to the Prevention of Deformities 635

Clinic of Dr. Frederic A. Besley, Cook County Hospital.

Regional Surgery: Diseases of the Chest Wall, Including the Pleura and Breast 659

ROENTIGEN TECHNIC (DIAGNOSTIC). —By Norman C. Prince, M. D. Attending Roentgenologist to the Omaha Free Dental Dispensary for Children; Associate Roentgenologist to the Douglas County Hospital, Bishop Clarkson Memorial Hospital, Swedish Immanuel Hospital, St. Joseph's Hospital, and Ford Hospital, Omaha, Neb. With Seventy-One Original Illustrations. St. Louis, C. V. Mosby Company. 1917.

The author has attempted to prepare a book for general practitioners, and there are many of them who have installed in their offices X-Ray equipments. He maintains that there is very little written in English, dealing exclusively with roentgen technic and it has seemed to the author that such a book is sorely needed. We are impressed with the author's manner of presenting his subject. The illustrations are very good and this is most important in the work of this kind.

THE MAYO CLINIC, ROCHESTER, MINN. 1916 COLLECTED PAPERS OF 1916.—Collected Papers of the Mayo Clinic, Rochester, Minn. Octavo of 1014 pages, 411 illustrations. Philadelphia and London: W. B. Saunders Company, 1917. Cloth $6.50 net; Half Morocco $8.50 net.

This volume represents most of the articles read or published by the staff of the Mayo Clinic in 1916. The surgical world especially looks forward to these volumes with interest and are never disappointed. Among the general subjects on which papers have been presented are the following:

Alimentary Canal, Urogenital Organs, Ductless Glands, Blood, Head, Trunk and Extremities, Technic, and General.

Under the head of General subjects are the following:

The Elements of Error in Abdominal Diagnosis.

The Omentum, Its Physiologic Value and the Need of Its Preservation.

An Appreciation of the Roentgen Ray and a Warning as to its Use in Surgical Diagnosis.

Hospital Problems of Gonorrhea and Syphillis.

Nature Value, and Necessity of Team-Work in a Hospital.

Dental Research, Its Place in Preventive Medicine.

Graduate Work in Ophthalmology and Otholargngology.

The Status of the Graduate Degree in Medicine.

Dr. John B. Murphy—An Appreciation.

In Memoriam: Dr. Emil Hessel Beckman.

PHYSICAL EXERCISES FOR INVALIDS AND CONVALESCENTS.—By Edward H. Ochsner, B. S., M. D., F. A. C. S. President, Illinois State Charities Commission; Attending Surgeon. Augusta Hospital Chicago. Illustrated St. Louis C. V. Mosby Company. 1917. Most books on this subject are too

technical for the general practitioner, but here is one which any general practitioner may follow with benefit to his patients. The exercises here recommended are simple, require no apparatus and are valuable to any doctor. We heartily commend the book to the physician.

THE TREATMENT OF EMERGENCIES.—By Hubley R. Owens, M. D., Surgeon to the Phila. General Hospital; Asst. Surgeon to the Phila. Orthopedic Hospital and Infirmary for Nervous Diseases. Chief Surgeon to the Phila. Police and Fire Bureaus; Asst. Surgeon Medical Reserve Corps, U. S. Navy. 12mo volume of 350 pages with 249 illustrations. Philadelphia and London. W. B. Saunders Company, 1917. Cloth $2.00 net.

There is a most urgent call at the present time for First Aid instruction as there are more than five thousand First Aid Classes in the Red Cross alone. The volume under review is very full and complete and will prove of interest to the teacher or pupil. We heartily commend it.

THE ELEMENTS OF THE SCIENCE OF NUTRITION.—Third Revised Edition, Enlarged. The Elements of the Scienc of Nutrition. By Graham Lusk, Ph. D., Sc. D., F. R. S., (Edin.), Professor of Physiology at Cornell Medical School, New York. Third Edition, Reset. Octavo of 641 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1917. Cloth $4.50 net.

Lusk is an authority beyond question in this country and it is fortunate that his revision comes at this time when the profession and public have their attention focused upon problems of Nutrition on account of the war. The book has been thoroughly revised.

The chapter on Food Economics is especially interesting as it gives much of the facts obtained from foreign countries since the war begun.

The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, $2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.
J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.
WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital, Boston, Mass.

OBSTETRICS AND GYNECOLOGY.
ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY
M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.
G. T. TYLER, M. D., Greenville, S. C.
R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.
J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.
E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

CAMP GREENLEAF, M. O. T. C., FT. OGLETHORPE, GA.

Editor Journal S. C., Medical Association.

Seneca, S. C.

I thought that perhaps you would like a little account of what is doing here, so as I have a little time this morning will outline our work for you.

In this Company No. 7, we have Carroll of Summerville, Peters of Columbia, Klugh of Cross Hill, Mower of Newberry, Salley of Orangeburg County, and myself from S. C. McFaden of Chester was with us, but left this morning for Petersburg, Va., with a Sanitary Unit.

There are several other S. C. men in Camp, among them Schayer of Columbia. We have over one thousand medical officers in camp. The men who come here for training draw pay according to rank, but while in camp rank as cadet officers and work in camp as privates, unless they earn "Non Com" offices. The work is intensive indeed. Reveille at 5:45 A. M., 2nd call at 6:00 setting up exercises for fifteen minutes, mess at 6:30. Police and sick call at 7:00 at 7:30 drill until 9:30, lectures from 9:30 to 11:30, Mess at 12:00, 1:15 to 3:15 lectures and quiz or paper work, 4:15 to 4:45 French, 5:30 Retreat, 5:45 Mess, and then study until taps at 9:30.

The lectures are given by U. S. Medical Corps men, graduates from the camp, retired Medical Corps men and others, Col. La Garde Med. Corps Retired lectured five times last week on Gunshot wounds. Col. Goodwin of the English R. M. C. three lectures on Front Line Medical Work. Col. Dercle of the French Army gave illustrated

lectures on the French Medical Corps work.

We had the honor (Company Seven) of leading two parades and reviews last week. These were the largest Medical Reviews ever held in America. First came the U. S. Reserve Medical Officers, over one thousand, next the Regimental Sanitary Units training here, next the Ambulance Companies, then the Field Hospitals. There were over four thousand men in the parade, with supply wagons, supply trucks, horse and motor ambulances, and pack mules, with also the sede car motor cycles of officers. The line was in platoon front and in that formation was an hour and a half passing the reviewing officers. Being in the first Company, which meant that we were the best or honor Company, we were able to fall out and watch the most of the parade. It was a most inspiring spectacle. Thousands viewed it. The parade was on McDonald Field, of the famous Chickamauga battle field. To take part in, and view a parade of such magnitude, and to think that every man, horse, mule and vehicle in it was to be used for the keeping fit, and relieving the wounded and sick and returning them if possible to the firing line, brings home the fact that we are in War. The food is excellent and costs $1.00 per day. There are other expenses of course, but I should say $50.00 or $60.00 per month would cover all expenses. Every physician would be a better doctor if he took this course. The work is hard, but the morale here is excellent. Every man goes into every thing even his weekly washing cheerfully and with the feeling of service for Uncle Sam. I have been here two weeks, and have worked mentally and physically as I never did before, but am feeling fine.

There are in Chickamauga Park about forty thousand men camped. Horses and mules are here in abundance, yet flies are not as plentiful in our mess hall as they are in the average city hotel dining room at home, so you see what the sanitation must be. The only sickness I've seen is reactions from "Para" and Typhoid vaccinations.

Well I must close. Urge the men to enter the Reserve Corps. The South is in the minority here. If you think this hurried letter of sufficient interest you may print it in the Journal.

Best wishes to all the men I know that you may see. If you print this, I send through it greetings to all my friends in the South Carolina Medical Society.

Good luck and kind regards from,

Yours truly,

W. J. Burdell.

STATE-WIDE ANTI-TUBERCULOSIS CAMPAIGN.

Under the direction of the State Board of Health, a state-wide campaign will be inaugurated through a central cooperating committee, headed by Mrs. Annie I. Rembert, field secretary of the State Board of Health, with regard to tuberculosis, and executive secretary of the South Carolina Anti-Tuberculosis Association, for the protection not only of the military camps of the state against tuberculosis, but also of the civilian population as well, and for the care and treatment of those who have contracted the dread disease.

This work is considered vitally important during this war emergency, and it is felt that it can be more effectively carried out in view of the rigid examinations which are being undergone and are yet to be undergone by thousands of young men in

the state, which will disclose many hidden places of the malady.

The cooperating committee of the tuberculosis war problem will be composed of the tuberculosis committee of the State Board of Health, the county chairman of the State Council of Defense, the chairman of the Red Cross organizations and special agents of the South Carolina Anti-Tuberculosis association. In each county there will be a subcommittee composed of the county supervisor, county superintendent of education, a representative of the county medical association, the mayor of the county seat, the president of the chamber of commerce, a representative of the women's clubs and a representative of the women's defense council. Mrs. Rembert will organize these committees, county by county.

EXPENSES M. O. R. C.
WAR DEPARTMENT, OFFICE OF THE SURGEON GENERAL, WASHINGTON.

August 29, 1917.

From: The Surgeon General.

To: Boards of Examiners for Medical Reserve Corps.

Subject: Expenses connected with commission in Reserve Corps.

1. It has been reported to this office that there is quite a bit of misunderstanding or misinformation on the part of applicants for the Medical Reserve Corps as to the cost of field outfit and other expense connected with accepting commission in the Reserve.

2. It is requested that you bring the following information to the attention of all candidates applying for commission in the Reserve:

One common error is that the field outfit costs not less than $300.00. An officer of the Reserve may easily spend this amount of money upon his outfit should he so desire, but it is entirely an unnecessary expenditure and an extravagance. Most officers of the Army buy their service uniforms from the Quartermaster Corps. The prices July 1, 1916 were as follows: Coat, cotton, olive drab, $1.33; woolen, olive drab, $3.95. Shoes, russet, $2.81. Overcoat, olive drab, $9.04. Trousers, cotton, olive drab, $1.19; woolen, olive drab, $2.62. Cot, folding, $2.06. Each officer should also provide himself with a folding chair, or table, the price of which is about the same as that of a cot; also a lantern and a few other articles. Buckets, canvas, for officers, $0.86. Basins, canvas, $0.36. Owing to the recent increase in prices, raw material and cost of labor, these articles will be from two to two and a half times the prices quoted above.

Blankets (each officer should supply himself with three) may be purchased in the open market at approximately $6.00 apiece. Bedding rolls cannot now be purchased from the Quartermaster's Department, but should be purchased in open market for about $10.00. Puttees, about $10.00 per pair.

It is an unnecessary extravagance for officers to purchase field uniforms at a price of $40.00, $50.00, or more.

Mess expenses. In the field officers as a rule mess with their organizations, the cost of which will be approximately $15.00 per month. Additional expenses will depend upon the personal equation of the officer.

The pay of the various grades is as follows: lieutenant, $2,000.00; captain, $2,400.00; major, $3,000.00, plus ten per cent. for foreign service.

Fifty dollars ($50.00) per month for an officer in the field would be a very liberal allowance for all expenses. It is understood that a number of medical men refuse to apply for commission in the Reserve Corps on the grounds

that the mess dues and other necessary expenses require the full salary of a first lieutenant. Such belief is absolutely incorrect. The expenses are as indicated above, and there is no reason why an officer in the field should not save the greater portion of his pay. In cantonments and camps in the United States the expenses would possibly be slightly higher, but in no case should they prevent an officer from saving the major portion of his pay should he so desire.

By direction of the Surgeon General, Robt. E. Noble, Lieut. Col. Medical Corps, U. S. Army.

FOURTH DISTRICT MEETING GREENVILLE.

The following circular letter has been sent out by the Secretary:

Anderson, S. C.
Sept. 22, 1917.

Dear Doctor:

The Fourth District Medical Society will meet in Greenville on October sixteenth. We are to have some excellent papers by some of the medical officers in the Training Camps at Greenville and Spartanburg on Military Medicine and Surgery.

Send me at once the title of your paper and make your plans to attend this meeting.

Yours truly,
J. R. Young, Sec.

THE ADAPTATION OF EXTERNAL METHODS IN THE TREATMENT OF GASTROINTESTINAL DISORDERS.

George M. Niles, M. D., Atlanta, Ga.

Local Counter-irritation over the Epigastrium or Abdomen. In many of the painful and acute disorders of digestion, as well as in some of the chronic affections, not only amelioration of the painful symptoms may be obtained by counter-irritation, but actual curative results.

The entire basis for the employment of counter-irritation rests upon reflex action, or the conduction of a nervous impulse to the part of the body which is diseased.

The indications for counter-irritation in this class of disorders are three for the relief of pain; for favorably affecting inflammations or congestions; and for causing the absorption or removal of inflammatory deposits after the active inflammation has ceased.

For acute pain in the stomach or abdomen the surface may be quickly reddened by the local application of chloroform, having a handkerchief or cloth saturated with it, and covering the cloth with another to keep out the air. As one area gets too hot, the handkerchief may be removed from place to place, and often this will be sufficient to relieve an acute epigastralgia. Not quite so prompt, but perhaps more efficacious is a mustard plaster, made by mixing powdered mustard with warm vinegar or water, plastering it over cloth or paper, and applying it to the desired spot. Should it be advisable to weaken the plaster, this can be done by the addition of a varying amount of flour while it is being mixed. This mustard plaster can remain on until the skin is well reddened, or if wished, until a blister is produced. When it is not desired that the mustard should be applied directly to the skin, the plaster proper can be covered with a thin piece of linen or cheese-cloth, which will to an extent protect the skin. There are also ready-prepared mustard plasters which are easily procurable, and can be cut into any shape or size indicated, moistened and applied to the needed location.

Among other methods of using gentle counter-irritations and heat to

the surface are poultices, made from various materials, such as meal, tender leaves of plants or trees, kaolin or feldspar. The last named has been exploited in this country to a stupendous degree, and has a wide sale at an exorbitant price, but in reality has no more virtue than any other poultice. The heat and moisture contained in poultices produce the good effects, and they should be frequently changed, so that both these properties may be present at all times they are used. Nothing is more useless or irritating than a cold or dry poultice.

Turpentine stupes are often helpful, and when kept hot and moist like poultices, possess all the virtues of the latter plus the counter-irritating effect of the turpentine.

Hare highly recommends the spice plaster as an eligible poultice in abdominal discomfort. This is made by mixing equal parts of allspice, cloves, cinnamon and nutmegs, and adding thereto one-half part of black pepper. These constituents are made into a homogeneous mass by using a knife-blade to mix them, and are then sewed in a bag, which is quilted to prevent sagging of its contents. One side of the poultice is now wetted with warm brandy, whiskey or vinegar, and applied to the part desired. If the skin is tender, the proportion of the pepper or cloes should be decreased. This plaster may be allowed to remain over the affected part for hours or even days, provided it is frequently moistened, and is quite useful in the treatment of chronic gastric catarrh and abdominal discomfort. It is also grateful to those dainty neurasthenics, who abhor a sticky poultice, or whose olfactories will not bear with comfort a turpentine stupe. The patients will find the spice poultice pleasant to use, cleanly to manipulate, and mildly counter-irritant and analgesic in its effects.

There are numerous methods of applying plain or dry heat to the abdomen, some of them quite simple, but none the less efficacious. A plain hot-water bag can be found in nearly every household and will always be grateful in its effects, when not too full of water, and therefore too heavy. When the bag is not convenient, a porcelain plate may be heated over a lamp or gas jet, and quickly applied over a painful area. I have also seen tin buckets or pans filled with hot water and brought into use for local counter-irritation, when no other means were at hand.

There are a number of agents which are useful in abating pain or soreness in the abdomen when either painted on or rubbed in. Tincture of iodine alone, or diluted with one part of tincture of belladonna to three of the iodine is an eligible local application. I order it painted on with a camel hair brush, making several applications as each coat dries. It seldom burns the first time, but after several "paintings" have been applied, it burns energetically. This may be applied once daily for three or four times, and then it will be necessary to leave it off for several days until the epidermis peels off. Iodine seldom blisters, but the epidermis desquamates, leaving quite a tender surface, which requires several days to become normal. For chronic abdominal soreness or tenderness, the iodine is beneficial, but is not prompt enough in its action for acute affections.

"Rubbing" with various liniments is an ancient method, but in some conditions useful, nevertheless. There are many drugs, pungent, volatile or oily that are of use in this manner. Turpentine, chloroform, capsicum, menthol, oil of cloves or sassafras and

many others. Then there are ointments of vaseline or lanolin as a base, that have in them capsicum or menthol, and are quite efficacious when applied locally. There is at present on the market an ethical preparation, called methyl salicylate ointment, which comes in a collapsible tube. This can be rubbed over the surface ad libitum, and often affords relief to either acute or chronic pains.

Another point to be considered in the use of local applications or liniments in gastrointestinal disorders is the fact that it gives the patient or attendants something to do, and when something is constantly or frequently done, there is a more satisfied frame of mind, so that the patient can wait with more equanimity the period when perhaps more logical measures have had time to take effect. This may be considered small and unimportant by some, but in the management of this class of cases, nothing that promotes the comfort or contentment of the sufferer should be overlooked.

Massage Roller. This consists of a revolving cylinder, which can be filled with hot or cold water, and which is furnished with a battery attachment. Heat or cold, or with a ninstrument attached to each battery pole, alternating heat and cold, combined with electricity, may be applied.

This method can be employed to advantage in chronic constipation from atonic intestinal musculature, in the dragging-down feeling accompanying relaxed visceral supports, in the vague abdominal pains so bitterly complained of by neurasthenics, and in epigastralgia.

The Cannon Ball. This has been advocated as a form of massage peculiarly suited for atonic constipation. The patient lies on his back, and rolls the ball about over his abdomen, trying in a general way to follow the course of the colon. Its real utility is doubtful, but it is not liable to inflict any damage, and it may serve as a psychic stimulant at least to idle and neurastenic individuals, who need something of this sort to keep them contented.

Abdominal Massage. Views as to the efficacy of this means of treating abdominal disorders, adhesions, inflammations or displacements are widely divergent, some lauding and some condemning.

As to massage in stomach troubles proper, I am uncertain regarding its benefits. I have employed it in many instances in dilated, stagnating stomachs, with poor motor power, and myasthenia, and have been disappointed in results. That the fault was not in the application was certain, as I availed myself of the services of expert and conscientious masseurs, so am sure that nothing proper or necessary was omitted. One case that afterward developed malignancy was, I fear, made worse by the manipulation.

Except in somewhat chronic conditions, where there is but little soreness, and there seem to be present perigastric adhesions, I would not recommend massage, and shall dismiss it with this brief allusion, as unsuitable for gastric disorders. Functional troubles of the stomach will probably be made worse by its use.

In the intestinal cases of chronic atonic constipation, relaxation or incompetence of the abdominal parietes, bearing-down sensations from enteroptosis, vague neuralgic pains from dragging and torsion of the intestines, and the cutting and "pulling" pains from old perienteric adhesions in all of these conditions have I noted apparent benefit following intelligent and persistent massage.

In most of these, there were also

employed passive exercise and various forms of scientific gymnastics.

Massage, according to Boas, is contraindicated in all recent cases of ulcer with adhesions, in which cases even its cautious application may cause a perforation of the ulcer and consequent disastrous effects. It should not be employed in any acute inflammatory conditions of the gastro-intestinal tract, nor in any acute states accompanied by fever or excessive accumulation of flatus. I might add that it is generally accepted that massage is not indicated in condition of accelerated peristalsis, or where, upon manipulation, the circular muscular fibers of the intestines tend to assume tetanic-like contractions. Malignant trouble, or the presence of metastases, or when the test for occult blood in the feces is positive, contraindicate. Boas also advises against it in the treatment of patients above forty years of age, in whom the symptoms of gastric diseases have appeared suddenly, unless malignancy can be positively excluded.

A detailed description of the many methods and movements of massage is not feasible in a paper of this scope, as it is a science within itself. Briefly, it may consist of rubbing, kneading, tapping or rolling motions, beginning at the upper part of the abdomen, and following the general course of the large intestine, descending. The small intestine should be manipulated as well as the abdominal muscles. Illoway recommends massage for five to fifteen minutes in adults, and three to five minutes in children, at least every other day for a period of six weeks, and then if there is improvement, at longer intervals, but for a long period of time. It should be given preferably in the morning in the fasting condition. A patient can practise automassage in the following manner: Sitting upright, with the right hand he should stroke the abdomen from the caput coli to the hepatic flexure, and then along the transverse colon. With the left hand, he can then massage down the descending colon. Circular stroking movements should then be made over the median abdominal region. This can often be conveniently carried on while he is sitting on the toilet endeavoring to have his morning evacuation of the bowels. The massage may last from five to ten minutes.

Where trained massage is not available, gentle rubbing or kneading with hands previously warmed, will prove both grateful and soothing, where there is no acute soreness. The physician can give directions and demonstrations sufficient for attendants of ordinary intelligence to comprehend and carry out, and, though no brilliant results may be attained, patients often desire it and claim to experience decided relief from even untraned manipulation.

Each of the methods mentioned have a place in the treatment of gastrointestinal disorders and some particular one, though unimportant in itself, when properly employed, may spell the difference between success and failure in the management of a discouraged invalid.

UNITED STATESS FOOD ADMINISTRATION.

Washington, D. C.

(The following information is sent to you for immediate release by the United States Food Administration.)

The United States Food Administration announces the creation of an Advisory Committee on Alimentation, the purpose of which is to gain the active cooperation of experts in the determination of policies of food control from the standpoint of the science of

nutrition. The Committee consists of C. L. Alsberg, Russell H. Chittenden, C. F. Langworthy, Graham Lusk, LaFayette B. Mendel, and E. V. McCollum.

Dr. Alsberg is Chief of the Bureau of Chemistry, Department of Agriculture, and as such is in charge of the administration of the Pure Food Law. Throughout his term of office in this position, six years, the administration of this exceedingly important department has been carried out with distinguished ability, with fidelity to the highest interests of the consumer, and in accordance with a policy of constructive development of the industries devoted to and related to the production of foodstuffs.

Prof. Chittenden is director of the Sheffield Scientific School of Yale University and is regarded as the dean of American physiological chemists. Throughout his nearly 40 years of activity in research, Dr. Chittenden has devoted his largest attention to the problems of human nutrition, in particular to the metabolism of protein. His views concerning the adequacy of smaller amounts of protein in the diet than were customary in Anglo-Saxon countries have gradually received recognition and his recent books on physiological economy in nutrition represent an advance expression of this point of view.

Dr. Langworthy has been for many years the head of the office of Home Economics of the Department of Agriculture. Dr. Langworthy was one of the earlier students of nutrition in our country, having been associated with Atwater in the early days of the history of the calorimeter in the United States, and many of the basal analyses of foodstuffs rest upon his investigations. Dr. Langworthy has carried through and supervised a large number of studies of regional diets through which our knowledge of the food habits of different sections have been greatly enlarged. In recent years Dr. Langworthy has devoted his attention to the development of the utilization of foodstuffs within the home and his name is thus familiar to the majority of American housewives.

Dr. Lusk is Professor of Physiology in Cornell University Medical College, New York City. A product of the school of Voit and Rudner, Dr. Lusk has devoted the past 20 years to the investigation of the fundamental problems of human nutrition, particularly in the relations of food need and work. The facility of Dr. Lusk in the exposition of the intricacies of his subject is well illustrated by the fact that he is at once the author of a successful book written for scientists and an unusually happy presentation of the subject in primer form for the layman.

Dr. McCollum, at present a Professor in the Department of Agriculture in the University of Wisconsin, has accepted a call to Johns Hopkins University to be the first Professor of Bio-Chemistry in a newly established department devoted to that subject. Dr. McCollum has executed within the past 10 years fundamental researches dealing with the relationship, in animals and men, of proteins of different sources and also of the important, though but recently discovered, efficiency factors in nutrition, whose absence results in deficiency diseases that are now the subject of great attention and active research in medicine.

Dr. Mendel is Professor of Physiological Chemistry in Yale University. In association with Osborne of the same university, Dr. Mendel has for years been engaged in a comprehensive research on protein metabolism in its relations to growth and health, carried out under the auspices of the

Carnegie Institution of Washington. Dr. Mendel has for a long time officiated in an advisory capacity in the Council of Foods of the American Medical Association and possesses wide knowledge in the practical affairs of nutrition.

In addition Dr. Alonzo E. Taylor, Dr. Ray Lyman Wilbur and Dr. Vernon Kellogg, members of the Food Administration, are ex-officio members of the Committee on Alimentation.

UNITED STATES FOOD ADMINISTRATION.
Washington, D. C.

(The following information is sent to you for immediate release by the United States Food Administration.)

The United States Food Administration announces the creation of an Advisory Committee on Public Health. This Committee has been created because the Food Administration, realizing that the nutrition of a people and the condition of its food supply bear intimate relations to the general problems of public health, sought the advice of experts in these lines. Dr. Welch has been named as Chairman of the Committee, the personel of which is as follows: Leonard P. Ayer, Herman Biggs, David T. Edsall, Cary T. Grayson, A. Walter Hewlett, T. T. Janeway, F. G. Novy, Richard M. Pearce, William H. Welch, and H. Gideon Wells.

Dr. Ayer is permanently identified with the school hygiene movement. He has been director of the Department of Child Hygiene, Education, and Statistics of the Russell Sage Foundation during the past ten years; and is the author of books and articles on the educational and statistical phases of health work.

Dr. Biggs is a member of the Rockefeller Institute and an authority on public health and sanitation. As a representative of the Rockefeller Foundation, Dr. Biggs has recently completed a survey of the health condition of France, with particular reference to tuberculosis.

Dr. Edsall is Professor of Internal Medicine in Harvard University; he has in the past devoted much effort to the investigation of nutritional diseases and within recent years has become identified with research in the general domain of industrial diseases, which bear to nutritional diseases, both in the individual and society, a close relationship.

With the creation of a large army and navy, the public service has a natural relation to the work of food control, and to represent the interests of the armed services of our country, Admiral Cary T. Grayson has been placed upon the Advisory Committee.

Dr. Hewlett is Professor of Internal Medicine in Stanford University and is a recognized authority on the subject of diseases of the circulation and elimination.

Dr. Janeway is Professor of Internal Medicine in Johns Hopkins University; he is the author of books and articles on diseases of circulation and elimination.

Dr. Novy is Professor of Bacteriology in the University of Michigan and through years of active research over the broadest domains of his subject has established himself as an authority upon the subject of general sanitation.

Dr. Pearce is Director of the Department of Research Medicine in the University of Pennsylvania. Dr. Pearce has paid particular attention to the subject of national health and sanitation and has during the past two years, as a representative of the Rockefeller Foundation, completed surveys of the conditions of health and sanitation of Brazil and the Argentine

Republic, at the requests of the governments of those countries.

Dr. Welch, Professor of Pathology in Johns Hopkins University, is scientifically and personally regarded universally as the dean of the American medical profession. There are a few departments of pathology to which Dr. Welch has not contributed in research; and there are no departments connected with public health upon which he had not impressed the influence of his wisdom and experience.

Dr. Wells is Director of the Sprague Memorial Institute of the University of Chicago, a research institution devoted to the investigation of diseases of constitutional type. Dr. Wells is the author of a very successful work on chemical pathology, the first of its kind in any language, and has contributed important research to many subdivisions of medical science.

It is believed that through the advice and cooperation of this committee, representing specialized workers in the various correlated departments of medicines, the administration of food control will be enabled always to work for the best interests of the health of the different classes in different sections of our country.

In addition Dr. Alonzo E. Taylor and Dr. Ray Lyman Wilbur, members of the Food Administration, will be ex-officio members of the Committee.

ORIGINAL ARTICLES

A DISCUSSION OF SOME OF THE PREDISPOSING INFLUENCES OF NERVOUS AND MENTAL DISEASES.

By J. F. Munnerlyn, M. D., State Hospital for the Insane, Columbia, S. C.

THE crying need of the day in the psychiatric world is a broader and more general knowledge concerning the etiological factors of insanity. In this paper, I shall attempt a brief discussion of what are considered, by present day authorities, the three great causes of insanity, heredity, alcohol, and syphilis.

Mental disease is a great and growing menace. On the date of the last federal census, January 1st, 1910, there were one hundred eighty-seven thousand, four hundred fifty-four persons in institutions for the insane in this country. This number exceeds the number of students in all of the colleges and universities in the United States. At that time, it exceeded the number of Officers and enlisted men in the United States Army, Navy and Marine Corps. About thirty thousand new cases of mental disease are admitted to institutions in the United States each year, and the annual increase in the number of patients under treatment is about six thousand.

Of those admitted, statistics show that heredity is the predominating etiological factor in 30 per cent. of the cases. It was only recently that the laws of heredity, as they relate to insanity, have begun to be studied in the light of the new theories of Mendel, Rosenhoff and others. As a result of these theories, it is now definitely known that the child tends to inherit every attribute of both parents, and parents, possessing certain peculiarities or unit traits, may be expected to

Read before the South Carolina Medical College Association, Spartanburg, S. C., April 18, 1917.

have children, a certain number of whom, will possess similar traits. This fact is clearly shown by the frequent admission to institutions of father and two or more children, or mother and two or more children, as the case may be (with some type of insanity). If both parents show stigmata, it is probable that all of the offsprings will be abnormal, if one parent shows stigmata, it is probable that some of the offsprings will be abnormal, and the children, who are themselves, normal, will be likely to beget defectives. It is also an interesting fact that stigmata may be transmitted in latent form from one generation to another, to reappear in active form in a third or fourth or still more remote generation. It is not infrequent that we have patients admitted to the hospital, the cause of their insanity being ascribed to such conditions as domestic trouble, grief over death of friends, business worries, love affairs, etc. We have now, however, come to realize the fact that emotion alone is rarely ever sufficient to cause a disturbance of the normal brain to such an extent as to produce a true psychosis, and if a true anamnesis can be obtained, we usually find that these individuals possess a nervous constitution tainted by heredity.

I believe it was Herbert Spencer, who promulgated the theory that life is a series of constant adjustments of internal relations to external relations. This theory has a direct application to those individuals, who develop a psychosis ascribed to emotional causes. It is the individual with a badly poised brain tainted by heredity, who has been unable to adjust himself to external relations, and not being able to cope with the burdens of life finally succumbs.

We must now take up a second great cause of insanity. The action of alcohol on the body and particularly on the nervous system and mind has been the subject of much careful study and experimental work. The general practitioner is probable more familiar with this etiological factor than any other cause of insanity, for, in his daily rounds, he not infrequently meets with the inebriate, who through untiring patience of friends and relatives, has escaped institutional care, but sooner or later, when friends and relatives, have exhausted their efforts, is given over to the State to be cared for and classed among its chronics.

Alcohol is always a poison when taken in excess, and in some individuals, a small amount may be an excess. Alcoholic insanity, however, usually develops from chronic alcoholism, from the excessive use of the poison for a long period of time. If a person habitually drinks in spite of the fact that he is injuring his health and destroying the happiness of his family, authorities now look upon such individuals as being fundamentally wrong from the beginning, and excessive drinking is merely an expression of his instability and not the cause of it. It is the craving of the unbalanced mind for something which alcohol and other powerful drugs supply. It is stated by one author that even in those individuals, who possess no apparent stigmata, and use alcohol excessively that there usually exists some long standing discord of the emotional life, and the excessive drinking is often merely a poor attempt to escape mental conflicts, or to satisfy deeply rooted desires, which do not appear on the surface of one's life.

This, however, does not alter the situation in regard to alcohol as an etiological factor of insanity, for as Hock of New York has well said, "alcohol is a poison tolerated by

society and with it many abnormal persons poison themselves, the result being a great many cases of mental disease, which, without the help of alcohol, would not have occured."

Delirium tremens, sometimes called the "horrors" or "trembles," is one of the most common forms of alcoholic insanity, it is an acute psychosis in chronic alcoholism, lasting on an average of four days. Many of these cases are never sent to an insane hospital, but in some cases, especially if a second or third attack of delirium occurs, permanent insanity may result.

Acute alcoholic hallucinosis is a psychosis lasting a few days, or weeks, characterized by hallucinations of hearing, and ideas of persecution without disorientation.

Korsakoff's psychosis, or polyneuritic delirium, is a syndrome in which are found multiple nurites, the patient is confused and memory lost. This is usually a chronic condition and is strikingly similar to General Paresis in its symptomology.

Paranoid states caused by chronic use of alcohol are frequently met with. Here paranoid ideas are developed, the most common delusion is that of jealousy or infidelity. These jealous delusions may not only lead to separation of husband and wife, but in some cases, to homicidal attacks upon an innocent wife, or some man imagined to be her guilty partner.

General Arterio Sclerosis is another condition we often meet with as a result of chronic drinking.

My last consideration of alcohol is a much mooted question, the effect of alcoholism on the offsprings, and there is still much discussion as to the potency of this question. Suffice it to say, however, that among children of chronic alcoholics, there is considerable more feeble-mindedness, epilepsy and other nervous diseases than among children of temperate parents.

A third great cause of insanity, namely syphilis, is one of the most important of the physical causes and has been shown by investigation that one-tenth of all the cases of insanity can be attributed to it.

Syphilis is not a disease of recent origin, for if our historical information is correct, it was introduced into Spain in 1493 by Columbus' sailors, who had become infected in the island of Hayti, and the next year, it spread as a fatal epidemic to Italy and France. At present, syphilis is as wide spread as the human race, and it is probably the most difficult disease to control. The disease, however, was not studied from a true scientific standpoint until 1905, when a German physician, by the name of Schaudinn, discovered the micro-organism, a corkscrew shaped germ, which we now know to be the cause of syphilis. Two years later, Wasserman perfected a test by which we can recognize the presence of syphilis in an individual, whether or not there are any outward signs or symptoms. As a result of these discoveries, syphilis took its place with the known infectious diseases, and thus, we have perfected the first great step toward the ultimate control and prevention of this disease.

The syphilis germs, having once gained entrance into the human system, may find lodgement in almost any part of the body, any organ may be attacked and become partially or completely disabled. By prompt and appropriate treatment, we may control the symptoms that arise during the first few months or years after infection takes place and it may appear that the disease has been cured. It is, however, in these cases of apparently cured syphilitics that syphilis plays its chief role as an etiological factor of

insanity. Syphilitic germs posses the property of lying dormant for a long period of time, often many years, and then, in an unexpected manner, the disease may manifest itself in the form of a cerebrospinal syphilis, General Paresis, or syphilitic endarteritis of the cerebral vessels, which comprise the three chief types of insanity caused by syphilis.

One hundred years ago, General Paresis was regarded as a medical curiosity, it is now, however, looked upon as a well recognized disease, and last year, in the State of New York, more death among males was caused by General Paresis than Typhoid fever. Paresis develops most often ten to twenty years after the original syphilitic infection and usually runs a fatal course in from two to five years, irrespective of treatment. The disease is more frequent among men of ability in professional or business life than among the ignorant and uncultured. Its early recognition is of far reaching importance, affecting not only the patient himself, but frequently has important bearing upon business and family ties.

Cerebrospinal syphilis is a condition closely allied to paresis, but is numerically of less importance. In these cases, the disease usually attacks the coverering of the brain, or the supportive tissues of the blood vessels, inflammatory deposits occur, which do serious damage to the brain, and in addition to mental symptoms, often cause paralysis of special muscle groups, blindness, etc.

In syphilitic arterio sclerosis of the brain, we find inflammation of the lining of the blood vessels carrying blood to the brain, thereby causing a partial or complete obstruction and consequently, deterioration of the parts of the brain involved.

In considering heredity, alcohol and syphilis as etiological factors of insanity, we are dealing primarily with preventive causes, with causes that are probably responsible for 50 per cent. of the cases of insanity. Here, perhaps more so than in any other field of medicine, should the principles of preventive medicine be applied.

DISCUSSION.

Dr. F. A. Coward, Columbia, S. C.

Mr. Chairman. I wish to congratulate Dr. Munnerlyn upon his very able paper, but I don't want that paper to go on record in our files without one correction; that is the statement about the origin of syphilis. I think that has been so well proved by Dr. Taylor, through his studies in Peru, where they blame it on poor old Pizarro, and later on they tried to blame it on Columbus. Those men had syphilis when they went over there,, and they infected the women. Syphilis did not originate in the new world.

DR. MUNNERLYN CLOSSES: Mr. President, I wish to thank Dr. Coward for his correction. If I am wrong, I am glad that he corrected me.

CARCINOMA OF FEMALE BREAST.

By Hugh S. Black, A. B. D., Resident Physician, Jefferson Medical College Hospital, Philadelphia.

ABOUT 97 per cent. of mammary carcinomata begin in the glandular structure, and in many of these cases there is a history of some inflammatory, tuberculous, cystic, or traumatic mammary lesions. As to which breast is the most frequently involved the statistics of surgeons vary.

Cancer of the breast is second in frequency to that of the cervix uteri, and naturally one will ask why is this and what is the origin of carcinoma? We do not know, and though many theories are advanced, yet there are

two that stand out more prominent than others. First, some claim that it is a parasitic disease, the germ, however, causing it has never been discovered, much less isolated. Carcinoma develops from epithelial cells, which, under proper stimulation, take on new growth and activity regardless of the surrounding tissues and grow without limit. There must be special conditions that make these epithelial cells take on new growth and activity. But what are these conditions? Repeated irritations and trauma, except in breast cases (here Murphy says but a moderately severe trauma) is one of the causes accepted for carcinoma, but nevertheless we all know of many cases which started without any known external stimulation. Repeated irritations, whether chemical, thermal or mechanical, and repeated trauma are probably not the real origin of cancer, but are predisposing factors.

Gaylord, in his researches on cancer, has shown that the growth and the clinical course of this disease are modified however, by the development of or the pre-existence of certain immune substances in the body and that this immunity to normal neoplasm as well as to bacterial infections and even to alien normal tissues are produced by the lymphatic apparatus, the principal organs of which are the spleen and bone-marrow. The evil result of indiscriminate routgeuotheraphy in the human being in the treatment of cancer may in some cases be due to injury to the lymphatic apparatus and the consequent diminution of the immunity.

The early and rapid malignancy of carcinoma depends upon the richness of the lymphatic supply of the zone in which it originated, and as such is the case, the breast is the most frequent source of early and fatal metastasis. It is rare that a fat woman between the age of forty and fifty years who has been operated on for carcinoma of the breast ever receives a permanent cure, while a thin, slender woman of the same age is more apt to have a nonrecurrence. We know that the relative richness of the lymphatic supply plays an important role in the time of spread and frequency of cancer transmission to more or less distant organs.

There are several lymphatic channels by which cancer cells are disseminated from the breast. First, the chain of lymphatics leading to the axilla represents about four-fifths of the lymph channels leading from the breast. Second, lymph channels leading to the skin in the second intercostal space close to the sternum. Third, channels leading to the sixth interspace in the anterior axillary line. Fourth, by channels leading from the skin in a radiating manner from the zone of primary infection. Fifth and lastly is Handley's idea of transmission, which is, that carcinoma is transmitted along the lymphatics to the umbilicus and along the round ligament to the liver. Murphy, however, states that the lymphatics do not lead from the round ligament to the liver, but that they lead from the round ligament along up through the mediastinum and that the danger of hepatic metastasis is due to hematogenous origin. Gross, and practically all German and English teachers, taught that the lungs were more vulnerable than the other tissues of the body so far as metastasis is concerned, while Handley shows a majority of metastasis to the liver, and Rodman showed more recurrences in bones, particularly of the spine.

Cancer, with all its local characteristics and fatal terminations, is a disease without a definite or distinctive symptomatology of its own, and unfortunately there are no pathognomonic

symptoms nor clinical signs by which mammary carcinoma may be postively recognized during the incipient stage of its development. The presence of pain is almost without exception a late symptom and is due to the extreme involvement of the tissues, although excessive pain may even accompany benign mammary neoplasm, mastitis, abcesses, etc. The retraction of the nipple is of extremely doubtful diagnostic utility since it may be observed in other mammary lesions and may not be present in advanced stages of undoubted carcinoma.

The presence of a lump does not necessarily designate carcinoma, for it accompanies benign neoplasms, and on the other hand there may be fatal metastasis before a lump is discovered in the breast. Mobility or immobility of the neoplasm is not of special diagnostic import, and, on the contrary, may constitute a prolific source of error, since a benign tumor may be mly adherent to the sub-adjacent structure, whereas carcinoma may be distinctly movable, or vice versa. Axillary lymph nodes, usually nonpalpable in the early stage, general enlargement or overgrowth of glandular structure occur in some cases that are not carcinomatous. Eczema of nipple, soreness, superficial ulceration, as a rule, possesses special diagnostic significance, but again it may not. It is therefore obvious that a positive clinical diagnosis of incipient mammary carcinoma is fraught with immumerable and oftentimes unsurmountable difficulties, regardless of experience, and it can be clearly seen that the only method by which accuracy of diagnosis can be secured is by careful microscopic examination of fresh and frozen sections of the neoplasm, but the best plan is to institute radical surgical intervention first and perfect the diagnosis afterwards.

The most important phase of the cancer question is the pre-cancerous condition and its earlier diagnosis, and if one waits until a clinical diagnosis can be had before he operates, the results will be no better than they were twenty years ago.

The only hope, therefore, for those unfortunate patients is early diagnosis with early and wide extirpation. The younger Gross in the late Seventies and early Eighties was preaching radical operation, and as a result he claimed to cure 9 percent of cases (with breast cancer). No other surgeon in this country was making such claims. His distinguished father, the elder Gross, and Agnew of Philadelphia, as well as Sands of New York, said that they had amputated cartloads of breasts and had never seen a radical cure. In 1888 Gross claimed to have cured 21.5 per cent. of his cases. Bull reported 26 per cent. of three-year cures, and Halstead 44 per cent. These statistics were based on patients in whom a clincial diagnosis was possible.

In making a diagnosis of neoplasms of the breast we should not lose sight of the benign tumors, as they are more common than once thought. Gross states that 9.5 per cent. of breast tumors are benign, while Rodman's analysis of more than five thousand cases taken from the German clinics, proved that 15.5 per cent. of mammary tumors were benign, while 2.5 per cent. were said to be sarcomata, making in all 19 per cent. The remaining 81 per cent. were malignant.

Chronic cystic mastitis, or abnormal involution, is a fibrous and glandular hyperplasia with retention cyst, the hyperplasia being the initial stage and the cyst follows as a result of pressure. Bertel states that 25 per cent. of his cases became carcinomatous, while Rodman found 21 per cent. of

his cases carcinomatous at operation.

This condition is difficult to distinguish from carcinoma, and the only safe method is the aid of the microscope. The differentiation between a benign and a malignant cyst makes it next to impossible to discriminate between cancer and chronic cases of cystic mastitis. Both occur about the same time of life, between the ages of forty and fifty years, or at the time of menopause, but there are some differences which are almost pathognomonic. Namely, that in abnormal involution the disease is frequently bilateral, whereas cancer is rarely so. The late Dr. W. L. Rodman, who perhaps has seen as much cancer as any man in this country, operated upon only two cases of bilateral cancer in all his experience. Cancer rarely gives any pain during its first year of existence, but chronic cystic mastitis is always painful. The text-book as a rule has always taught that cancer is a painful disease, but the prevalent idea now is that cancer is not painful until in its later stages when ulceration occurs and adhesions to the skin and to the costal wall beneath has taken place. The early stage is absolutely painless, and in this point differs from any inflammatory condition. Another point to be remembered is that in abnormal involutions the pain is intensified during menstruation, the breast becomes enlarged and tender, but immediately subsides after the period ceases. Pain is increased by pressure over the site beneath which the cysts are found, or where inflammatory changes are most marked; the veins are often enlarged but not so much as in sarcoma, while in cancer of breast you will not usually find this.

Again, there is never any adhesion to the skin in abnormal involution, but in cancer they are usually present in the early stages. In cancer the axillary glands are most frequently involved, but they are quite often involved in abnormal involution. In the latter they are smaller and painful but they have never become matted together and form one large mass as they do in cancer.

In abnormal involution there is frequently a discharge which is clear and watery, or a straw-colored serum exudes from the nipple, or maybe made to do so by pressure, while this discharge is very infrequent in cancer and if present it is sanguinous.

Another benign condition is papillary cystadenoma, which may be an advanced stage of abnormal involution, characterized by a discharge of blood from the nipple, which can be recognized clinically by being situated immediately behind the nipple, and the age of the patient is usually forty-eight or forty-nine. A bloody fluid in a cyst of the breast is suspicious of two things, namely, carcinoma, and villous growths within the cyst with hemorrhagic tendencies. While a papillary cystadenoma is nearly always originally non-malignant, it usually becomes cancerous rapidly, and as it is a potential cancer, it should be treated by a radical operation.

Thus in a large percent of cases many of us will not be able to discriminate between a simple benign tumor and a malignant growth, hence the importance of having a competent pathologist at our command. To sacrifice the breast of a woman is a serious loss, but it is **nil** compared with the loss of life itself. Therefore, surgeons should spare no means to make an early correct diagnosis, or to differentiate between a simple growth and one that has undergone malignant change. If the operation is in doubt, always do a complete operation.

The last pre-cancerous condition that

I will mention is Padget's disease, probably better called Padget's cancer. This is not primarily a cancer of the skin of the nipple, advancing inward, but it is a cancer of the milk duct, and is called duct cancer. The cutaneous involvement is secondary and it is caused by the discharge which comes from the diseased tissue. The first sign of Padget's cancer is a little milky yellow secretion from the nipple which irritates, causing an eczema of the skin, which finally destroys the squamous epithelial cells of the nipple, producing an ulceration that is more or less superficial and on which a little crust often forms. If this scab is pulled off a drop or two of blood makes its appearance. These patients will often call on the family physician for a salve or paste for their eczema, and, as a rule, they get it without the physician even examining the breast, whereas, in fact, the breast should be amputated at once, because, Padget's disease is a cancer from the moment of its inception.

The first erosion of the nipple, or the first induration at the base of the nipple, in non-lactating patients, is suggestive of the first manifestation of Padget's disease and should be operated on immediately. When Padget's disease is diagnosed with only a little peri-mammallary irritation as its manifestation, it has ultimately a 90 per cent. cancer mortality, because of failure to have the scalpel used.

Though characteristic milky discharge may sometimes be found in some forms of breast cyst, it does not produce the peri-mammallary eczema and does not produce that red area which is seen at the end of the nipple.

It is quite true that cancer is most common in middle aged people, but the opinion of many students is that this malady never occurs before this age, when in fact 11 per cent. of cases of cancer of breast occur between the ages of twenty and thirty years. As already stated, 11 per cent. of breast tumors are benign, and 35 per cent. of the 11 per cent. of the benign tumors occur between the age of ten and thirty. Does it not seem wrong to lay so much stress on the cancer age?

The radical operation for cancer of breast as it is understood on this continent, was introduced to the profession by Halstead and Willy Meyers in 1894. Volkman, Billroth, and Gross had all removed the muscles years before, but Halstead and Meyers advised their removal in every case because a thorough dissection of the axilla is impossible with the muscles **in situ.**

Most surgeons start from the sternum and work toward the axilla, though Rodman states that it is far better to start from the axilla and work toward the sternum, for reasons which are surgical, anatomical, and pathological. Halstead himself secured 44 per cent. of cures, and others have done as well by working from the sternum toward the axilla, but if one will consider the following reason offered by Dr. Rodman, no doubt it will appear that working from the axilla to the sternum is the better.

In the first place, one works from healthy toward diseased tissue, and thus avoids forcing the cancer cells into the lymphatic vessels and prevents their being further disseminated.

Secondly, the axilla may be so extensively involved that a radical operation may be useless, and if this is true, the sooner you know it the better, rather than discover it after the operation has been practically done and the breast removed.

Thirdly, one can outline the incision much better, and so as not to interfere with the functions and future usefulness of the arm.

Fourthly and lastly, one can ligate

the vessels at their roots and in such way can do almost entirely away with hemorrhage.

As regards ultimate results, they are better now than formerly, but the prognosis in mammary carcinoma, no matter what the method of treatment instituted, is always exceedingly grave as to permanent cure. Probably the reasons for better results are due to the facts that the diagnosis and operation are made and performed earlier; that a wider area of possibly infected tissue is removed; and because of the use of the X-ray and the wounds being treated with same before suturing. Statistics have proven of late that better results are obtained in private patients because of their better intelligence, because of their better resistance, because they apply for treatment earlier, and because they carry out post-operative measures better.

The Stewart operation is probably the best at the present time.

Tumors are frequently overlooked because we expect to find a large growth, but one should always remember the fact, that cancer really begins microscopically. The family physician can, by making an early diagnosis, do much towards saving the lives of many suffering from this disease and if he fails with such opportunity the responsibility falls upon him and not the surgeon who is called to do a late operation.

There is no doubt but that many of these patients keep to themselves every sign and symptom of carcinoma even long after they realize that something is radically wrong. This is due more to modesty than anything else.

Every tumor of the breast in which there are conditions associated with any or all the classical signs or symptoms of carcinoma should be treated radically and should be looked upon as an acute surgical emergency.

STONES IN THE URINARY TRACT.

By E. P. Merritt., M. D., Instructor in Genito-Urinary Surgery, Atlanta Medical College (Emory University), Urologist to Georgia Baptist Hospital, Atlanta, Ga.

The formation, and chemical composition of stones will not be taken up in this paper, as fully as the symptoms and diagnosis.

Long ago, before the modern diagnostic instruments were in use, the aggravating symptoms of stones were supposed to be punishment sent upon the sufferer, for some deed committed, as other maladies of the human body were, but in the light of modern medicine, things have materially changed. In this advancement, the branch of Urology has made more progress than most any one of the other special branches of medicine; for instance the cystoscope, the various methods of determining the kidneys' function, the important technique for removing the prostate, and other operations of urological nature.

Stones in the urinary tract may be lodged in the kidney, ureter, bladder, or urethra, and more uncommonly the vesicles and prostate. Of course there is a reason for stones. They usually begin as a small lump of bacteria or desquamated mucus membrane. Gathering around this nucleus will be the solid matter of the urine, usually phosphates, or urates of course mixed with other matter of urinary composition. It seems to be the prevailing belief that all stones give great pain at all times, but this is not so. It is true that, as a rule, we get more pain from ureteral or bladder stones than we do from stones in the pelvis of the kidney, but, all urinary stones give pains at some time or other. The

symptoms of renal stones are usually as follows: history of renal colic, pains in kidney region referred to lumbar region and down the thighs, oftimes down the legs, with blood and pus cells in the urine, either microscopical or macroscopical. The X-ray will usually give the shadow of stone, if it is not pure phosphatic or uratic in character. If the stone is very large, filling the pelvis and the calices, then comes the question as whether to remove the stone, leaving the kidney intact or not. This question should always be decided before operation, if possible; and it can be in the majority of cases. There are some important facts worth knowing before either kidney is removed, namely: the functional capacity of the affected one, and the function of the opposite one. A thorough urinary test should be made of each one previously, especially the functional tests. It is not good surgical judgement to take out one kidney, not knowing fully the functionating power of the other. Oftimes large stones are left in one side, because the other side is a very unaccomodating friend, not sufficient in its secreting power to maintain life.

Stones in the Ureters.

The ureters are very common organs for stones to lodge, being very small tubes, about 11½ inches long with three constrictions. The symptoms most commonly met with in ureteral stones are as follows: pain, reflected to front and back, shoots to the side of vagina in women, the testicle and one side of the penis in men. If the stone is large enough to block back the urine, the pain is more severe, causing distension of the kidneys and giving an undue amount of distress.

For complete diagnosis, the catheterizing cystoscope plus the X-ray is indispensable. Oftimes the urine has some blood and pus cells in it, also urinary deposits of the predominating stone substance. To tell just where in the ureter the stone is lodged requires an iron oxide catheter up the ureter, plus a picture. The catheter will give distinct shadow, and you can compare the distance. The wax tipped catheter is useful in many cases where the X-ray fails to show a shadow. A large majority of stones in the ureter can be removed by the aid of the operating cystoscope. I have lately removed several by the following method. Give the patient large doses of morphine and atropine hypodermically, cystoscope, and dilate the ureter as much as possible, then inject about 2 c. c papaverin sulphate solution below the stone; wait 15 or 20 minutes, then inject 1 or 2 c. c. sterile olive oil, removing the catheter and scope. Put the patient to bed, and, if able, order a hot sitz bath; this procedure doesn't get them all, but it does get many of them, and is worth trying before operative measures are resorted to.

Stones in the Bladder.

The symptoms of stones in the bladder vary somewhat. Sometimes you see a patient give one symptom another, a different variety, but the usual symptoms most noticeable are pains in the bladder region, referred to the testicles and end of the penis. In this condition urine looks muddy and there's always shreds of mucus, pus and blood cells. The larger the stone, the more severe the symptoms. There is more pain on exertion than when quiet, generally accompanied with frequent desire to urinate, and at the end of urination, a sudden cut off of urine with biting and painful sensation. Stones in the bladder are not always diagnosed readily, for different reasons. There is not always a clear history, or the symptoms are not always directed to stone. Oftimes there

is more of a general cystitis in character. If the patient isn't very badly strictured, or the prostate not too much enlarged, the cystoscope may play the leading part in diagnosing the condition, and make it one of the most easy and satisfactory diagnoses of any of the conditions in medicine. You see and seeing is believing.

Stones of the Urethra.

Under this head, just in passing, I will make a few brief remarks. It is not often that stones are lodged in the urethra, but I have seen one case where a stone was lodged just posterior to the meatus, which had to be opened to permit it to pass. Stones of the prostate and seminal vesicles are more common, I think, than are recognized. They give very annoying symptoms, which are not satisfactorily reached with the ordinary therapeutic agents administered. One of the outstanding symptoms and one that works upon the mind as well as the body is the constant burning and irritated feeling in the deep urethra.

Finally: The X-ray is a very useful aid to diagnosis, especially if the patient is placed in the proper position when the picture is taken. I fully realize that the subject has not been covered thoroughly, but briefly touched as to the important or cardinal symptoms, as we see them in every day practice. If we consider the pathology and destructive changes that take place where a stone is surrounded by mucus, and is oftimes very tightly surrounded, then we can realize why some of the patients pray for the mountain tops to fall upon them.

A PLEA FOR LOCAL ANESTHESIA IN MAJOR SURGERY.

By J. H. Johns, M. D., Surgeon in charge, Oconee Hospital, Westminster, S. C.

LOCAL Anesthesia is not new. Medical literature shows that the ancients were aware of the sedative action of cold and of certain plants. The Chinese before the 12th century, recognized the sedative action of Mandragora, Hyoscyamus and Opium.

About 1784 J. Moore, of England, did amputations by prolonged (1. or 2. hours) constriction and large doses of Morphine.

After the invention of the Hypodermic Syringe, by F. Rynd, of Edinburgh, in 1845, Morghine was injected around nerves to produce anesthesia, but no decided effect was obtained. About 1874 Bennett demonstrated the local anesthetic effect of Cocain. It was first generally used by Ophthalmologists. Before the powerful toxic effect was appreciated, many fatalities resulted. Halstead is credited with demonstrating, in 1885 that anesthesia could be produced by distending the tissues with water.

Local Anesthesia for the general surgeon has been developed, practically in the last 20 years. A number of drugs have been brought forward, as Local Anesthetics, of these, we will only consider a few which seem to be the most useful.

Cocain, the first reliable drug for local anesthesia, is still the most powerful one we have, but unfortunately the most toxic and can not be used safely in doses of more than ¾ grain. Even this dose will produce toxic symptoms in many cases, especially if

Read before the South Carolina Medical Association, Spartanburg, S. C., April 18, 1917.

thrown too rapidly into the circulation.

Beta-Eucain, is slightly less toxic than Cocain, but also less active as an anesthetic, so is only a slight improvement on Cocain.

Novocain, (Introduced by Einhorn, in 1905) is the best of the now available drugs. It is five to seven times less toxic than Cocaine and only slightly less efficient. It is non irritating, does not produce midriasis and is followed by very little, if any, hyperemia.

Quinine-Urea, since 1907, has been used in from ¼ to 1 per cent. solution. This agent produces burning when first introduced into the tissues and is rather slow in producing anesthesia which lasts from 1 to 4 days. Sloughing has been reported and Tetanus has followed the use of this preparation, when infection at operation could apparently be excluded.

Stovain, is used considirably by the French but is probably no improvement on Cocain.

Alypin, is used quite a little in Germany. It is probably no improvement on Cocaine.

Anesthesin, is most useful in an ointment after rectal operations to relieve the pain which we often have in these cases for the first 24 hours after operation.

By the isolation from the Suprarenal gland of Suprarenin, by Von Furth in 1900 and Adrenalin, by Aldrich and Takamine, in 1901, Local Anesthesia was given a physiological Tourniquet which has made possible its present development.

These agents, when combined with the local anesthetic agent, so constrict the bloodvessels in that area as to slow the absorption and prolong the anesthesia beside lessening the systemic effect of the anesthetic agent, that we are enabled to do major operations on parts which were out of the question before.

In Suprarenin Synthetic, we have an agent which is superior to Adrenalin, in that being a synthetic, it is more stable, will stand boiling and observers believe it is as efficient as Adrenalin.

From 1880 to 1890. Infiltration Anesthesia was developed by Halsted Corning, Schleich and others and this is the usual practice now.

Halsted, Corning and others, during this same period, found that a nerve trunk injected would anesthetize the entire area of its distribution. From this knowledge was developed Regional Anesthesia, which includes: Paraneural, Intraneural, Spinal, Intravenous, Intra arterial and Hackenbruch Regional.

Cecil, of Genoa, in 1897 recommended Morphine as a preliminary to local anesthesia and it is almost universally used now.

With some one or a combination of these methods, we are able to do many major operations. The question is: Why is local anesthesia not more generally used? Why do most surgeons use local anesthesia for circumcisions and other minor operations and not for major operations?

I believe that a general anesthetic is more dangerous, and it is certainly more disagreeable, than the average operation and for this reason I have taken an unusual interest in local anesthesia, ever since I have been doing surgery.

The attitude of most surgeons is probably due to the fact that they have not used it enough to learn how to get the best results or to know just what may be done, and thereby get enough confidence in its efficiency to risk it in major work. Some say it takes too much time. Most of us

could and should take more time, if it is to the patient's advantage.

During my early experience with local anesthesia I saw, on several occasions, pretty severe toxic effect from Cocaine as well as Eucaine and was always afraid to use either in sufficient quantity to give satisfactory anesthesia for major operations. After Novocain was introduced, I began using it and after using it about ten years I have never observed any toxic symptoms. The claim that it is 6 or 7 times less toxic than Cocain, while practically as efficient an anesthetic, has been fully borne out in my experience. After being satisfied as to the low toxicity of this agent, I was emboldened to undertake many operations under local anesthesia where I had been forced to use general anesthesia before,, and with most gratifying results. I am willing to say that in one or two cases it has, very probably, meant the difference between life and death. By its use we avoid much discomfort, vomiting, undue strain on stitches from vomiting, etc. Our nurses fully appreciate the difference in the after care of patients operated under local anesthesia and those under general. The patient, especially if he has had any experience with general anesthesia, will thank you for sparing him the unpleasantness following practically all general anesthetics, and many patients will submit to operation only if they can avoid general anesthesia. These things are, we think, worth considering but they are of small consequence when compared with others as: Avoiding the immediate danger from anesthetic, avoiding the shock incident to general anesthesia, and avoiding the, more or less remote, after effects of general anesthesia which we know are, in many cases, of very great consequence.

I operated on a patient, about 70 years old, with an old incarcerated femeral hernia, which had been strangulated 2 or 3 days and with stercoraceous vomiting for 12 hours or more, for whom I had very little hope. She went on the table with a weak pulse of 124—vomiting every 10 or 15 minutes—and after a rather tedious operation, lasting over an hour, she came off the table with a stronger pulse of 110. She vomited a very little only once after being put to bed and made an uninterrupted recovery with a cure of her hernia. Compare this with the usual story in such cases. This patient had carried her hernia for 15 or 20 years because of her fear of being put to sleep.

Patients operated on under local anesthesia will rarely tell you that they feel any worse from having been operated on. They sometimes say they feel tired from lying in one position so long, but I believe they complain less of backache than those operated on under general anesthesia.

I use a ¼ per cent. solution of Novocain in 4 per cent. Salt solution, at room temperature, to which is added 12 to 15 minims, Adrenalin Chloride (1-1000) or preferably, the same quantity of Suprarenin Synthetic, after estimating the quantity of anesthetic solution I will use at that operation. ½ per cent. strength may be necessary for injecting nerve trunks, but the weaker solution will usually be sufficient.

There are just a few points to be remembered, which are necessary to the success of this work viz: You must have a pretty accurate knowledge of your Anatomy, you must use the proper technic in injecting, you must use a sharp knife and not get in a hurry. With these things in mind, with the full confidence of your patient and a reasonable confidence in yourself you will be pleased with the result.

Some of the conditions we have handled under Local anesthesia are: Felon, incision, Circumcision, Amputation, fingers and toes, Hemorrhoids, ligature operation, Fissure in ano, divulsion sphincter and excision, fissure, Varicocele, resection veins and amputation scrotum, Hydrocele, Bergman operation, Growth of lip, excision, Tonsils, enucleation, Adenoids, removal by curet, Laparotomy, exploratory, Appendicitis chronic, appendectomy, Goiter, subtotal thyroidectomy, Lipomata and other superficial tumors, excision.

In some of these cases I had an Anesthesist at hand, but in only one, a McBurney for appendix, have I had to call on him for help. The more I use this anesthesia the more I find I can do under it and I believe the time will come when the majority of operations will be done under local instead of general anesthesia. Dr. Bodine, who has done a great deal of Inguinal hernia work under local anesthesia, says: "It is criminal to do an operation for strangulated herina under general anesthesia." I am almost tempted to go him one better and say; it is criminal to do an operation for any Hernia in the adult under general anesthesia, when it can be done so easily under local and with so much less danger and so much less discomfort afterward.

In my experience, the wounds have always healed kindly, the anesthetic in no way interfering. Infact, I am inclined to believe the more gentle handling and sharp dissection, necessary in these cases, retards healing less than the more rough treatment usual under general anesthesia.

Special credit should be given, Matas and Allen, of New Orleans, Halsted and Finney, of Baltimore, Crile, of Cleveland, and Bodine, of New York, for developing Local Anesthesia to the present extent in this country.

1. Owing to the fact that Novocain is made in Germany, it has been difficult to get during the last year. We notice, however, an article in the International Clinics No. 1. Vol. 1917, by Dr. Wm. M. Beach, of Pittsburgh, in which he says there is being put out a domestic product, Aposthesine, which is supposed to be identical with Novocain. Dr. Beach has found it very satisfactory.
2. The historical Data was obtained from Local Anesthesia, by Carroll W. Allen, 1914. Also Modern Surgery, by J. C. Dacosta, 1915.

DISCUSSION.

By W. A. Strickland, Westminster, S. C.

Mr. President, I would not say anything at all, if the other men were willing to get up and say something. I would like to hear some one jump on the paper and thresh it out. The first local anesthetic hernia operation I saw was done by Dr. Bodine of New York City. It struck me as most remarkable that a man would lie on the table and smoke a cigarette or eat an apple and show no sign of pain. I followed the patient to the ward and he showed no sign of pain afterwards, and it has been my privilege to see Dr. Johns do these operations under local anesthesia; in fact, I am going to add a word about the old lady. I pleaded with her to have an operation and she would not. Finally she sent over to my house and said, "Doctor, I am going to die; you will have to operate." (She had strangulated hernia.) Before that she would not agree to it; said she would not have any cutting done on her. So I 'phoned for Dr. Johns and a nurse, and by the time we got to the hospital the operation was begun. We had an anesthetist there ready to give a general anesthetic, provided it was absolutely necessary. Went right down to the hernia. There was the hernia sac perfectly. After throwing that back in the cavity the old lady lay on the table and went to sleep, and we packed it with gauze. After a while the

clamp (?) was withdrawn. The old lady made an uneventful recovery, and although it has been more than three years ago she is perfectly well and happy today. I have seen him do several operations for hemorrhoids. The only thing about operation for hemorrhoids they complain about burning, for an hour or so afterwards. They are all glad they have not had a general anesthetic. I saw Dr. Johns do an immense operation for hydrocele. He just dissected the thing out, and the patient was well in just a few days. We did not diet; just gave a light diet, and the patient went on to recovery.

Dr. W. R. Barron, Columbia, S. C.

Mr. President,I think it is a great pity for a man to read a splendid paper like this and bring out the results of such immense practical value, that I am just going to take issue on one point: (I have seen lots of these things done). It is almost criminal to use a general anesthetic when we can use this, and I say that for this reason: To stimulate our having some expert anesthetists. I think where you have the advantage of having an expert, trained anesthetist, that a local anesthetic is not superior to the general, the way these men can give gas and get through with it. We need more men specializing in general anesthesia.

Dr. Johns Closes.

Replying to the Doctor, I have had quite a little bit of experience in anesthesia myself. I have given quite a number of gas oxygen anesthesias myself, and they are nice, but even the gas-oxygen anesthesias are, in my opinion, more dangerous than the local anesthesia, properly employed. They are certainly more dangerous than the local anesthesia, properly given, in the majority of cases—sometimes you find a case hard to anesthetize by local anesthesia, just the same as in general anesthesia.

Even gas-oxygen is certainly disagreeable. In gas-oxygen or any other general anesthetic one of the main points I wished to bring out in my paper was that you are hurried while with local you have all the time necessary for the gentle handling of the tissues. Where you cannot use the local anesthesia, the gas-oxygen is preferable to the other general anesthetics. Ether comes next.

I have thought over both sides of this pretty carefully, and from the standpoint of the patients, although I have never taken an anesthetic myself, and hope I will never have to take one. I am satisfied the more you use this local anesthesia the more you will see you can do with it, and the more you will be in favor of local anesthesia, instead of the general anesthesia. I only ask you to try it.

BOYDEN NIMS

Chemist

MICROSCOPIST, BACTERIOLOGIST

910-911 UNION BANK BUILDING
COLUMBIA, S. C.

My laboratory work has been relied on by over forty Columbia physicians for aid in the treatment of sickness in their own homes. What better indorsement could they furnish?

SOCIETY REPORTS

LAURENS.

Doctors Meet at Gray Court.

The members of the Laurens County Medical society were entertained at Gray Court by the physicians of that community Monday afternoon, Aug. 27th, when an interesting session of that organization was held there by invitation. A feature of the entertainment was the serving of several large, ice-cold watermelons. Reports from this part of the social service indicate that the doctors, forgetting the usual warnings given to others as to the danger of overeating such juicy fruit, devoured the melons just like other folks. President Fennell of Waterloo presided over the meeting and Dr. Rogers of Gray Court presided over the destruction of the melons. The other doctors say both performed their parts well. Drs. Vincent and Rodgers read interesting papers and the meeting, which was well attended, was pronounced a success.

The September meeting will be held in Laurens. Dr. R. E. Hughes will discuss the subject of "Blood Pressure" and Dr. J. H. Teague will discuss "Operations on the Gall Bladder,"

J. M. Bearden, Sec'y.

BOOK REVIEW

HANDBOOK OF GYNECOLOGY FOR STUDENTS AND PRACTITIONERS, BY HENRY FOSTER LEWIS, A. B. M. D.—Professor and Head of Department of Obstetrics and Gynecology in Loyola University School of Medicine; Chief of Obstetric Staff of Cook County Hospital; Fellow and Ex-President of the Chicago Gynecological Society, Late Assistant Professor of Obstetrics and Gynecology in Rush Medical College (in Affiliation with the University of Chicago.) and Alfred de Roulet, B. Sc., M. S., M. D., Professor of Gynecology in Loyola University School of Medicine; Attending Gynecologist to the House of the Good Shepherd, and to St. Bernard's Hospital; Obstetrician and Chief of Staff of St. Margaret's Home and Hospital.

With one hundred and seventy-seven illustrations.—St. Louis, C. V. Mosby Company, 1917, Lewis.

We have here a manual written especially for the benefit of the third and fourth year medical students and for the young practitioner. The authors claim that they have adopted a different classification from the one usually found in text books which has been evolved during the twenty years of teaching. The drawings have been presented with great care.

A TEXTBOOK OF ANATOMY FOR NURSES.—By William Gay Christian, M. D., Professor of Anatomy, Medical College of Virginia, Richmond. With thirty-four original illustrations, five of which are in colors. St. Louis, C. V. Mosby Company, 1917. Anatomy.

The volume before us is very creditable from every standpoint. Well bound, good print on excellent paper. The illustrations are above the average in a book of this kind and we heartily commend the volume for the purpose in view.

THE PRACTICAL MEDICINE SERES.—Composing ten volumes on the year's progress in Medicine and Surgery.

Under the General Editorial Charge of Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northwestern University Medical School.

VOLUME V PEDIATRICS.—Edited by Isac A. Abt, M. D., Professor of Pediatrics, Northwestern University Medical School, Attending Physician Michael Reese Hospital. With the Collaboration of A. Levison, M. D., Associate Pediatrician Michael Reese Hospital.

ORTHOPEDIC SURGERY.—Edited by John Ridlon, A. M., M. D., Professor of Orthopedic Surgery Northwestern Uni-

versity Medical School, with the Collaboration of Charles A. Parker, M. D. Series 1917, Chicago. The Year Book Publishers, 608 South Dearborn Street.

THE PRACTICAL MEDICINE SERIES.—Comprising Ten Volumes on the Year's Progress in Medicine and Surgery.

Under the General Editorial Charge of Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northwestern University Medical School.

VOLUME IV GYNECOLOGY.—Edited by Emilius C. Dudley, A. M., M. D., Professor of Gynecology, Northwestern University Medical School; Gynecologist to St. Luke's and Wesley Hospitals, Chicago and Sydney S. Schochet, M. D., Instructor in Gynecology, Northwestern University Medical School; Adjunct Gynecologist, Wesley Hospital, Chicago. Series 1917, Chicago. The Year Book Publishers, 608 S. Dearborn Street.

ABSTRACTS

SCABIES.

Among the cases shown by Hartzell in a skin clinic at the University of Pennsylvania was an example of Scabies. While Scabies is a common condition it often goes unrecognized and still more often is imperfectly treated. Scabies and pediculosis are the only two itching diseases that may be "caught." Small family epidemics are of frequent occurence.

Hartzell points out, in the International Clinics for June, that the diagnosis is to be made from the fact that the disease is contagious and that it shows a predeliction for certain regions.

In very young children the palms and soles are often affected. In adults the sides of the fingers, the flexures of the wrists, the anterior axillary folds, the breasts in women and the shaft of the penis in men. An itching desire situated in these regions is almost certain to be Scabies. Close examination will show a few small, dotted, sinuous lines or burrows which are absolutely pathognomonic of Scabies.

Ten or twelve percent sulphuric ointment is an efficient remedy but is too irritating for infants and young children. Hartzell recommends for the latter equal parts of styrax and olive oil, or one or two drams of balsam of peru to the ounce of vaseline. Whichever remedy is employed it should be rubbed in from the neck to the end of the toes and fingers on three or four successive nights. This should be followed by a bath and then wait for three or four days to see whether the treatment has been successful and to avoid producing a dermititis. If unsuccessful the treatment is repeated. All members of the family must be treated.

GOUT AND INFECTIOUS ARTHRITIS.

By Henry A. Christian, M. D.

In two clinical lectures, in the International Clinics for June, Christian considers the differential points between Gout and acute and chronic Arthritis.

There are three types of Gout:

First, obvious depositions of urates in the bone or in the cartilage, or in both.

Second, in which that does not occur, but in which there are chronic arthritic changes, with exostoses and associated atrophy of the cartilage, etc., sometimes with depositions of urates in the soft parts around the bone, adjacent to the bone, but not in the bone.

Third, very little change in the joints, inflammatory change in the soft parts, but no obvious deposition of

urates in the soft parts about the joints or in the bones or cartilage. In all three types depositions of urates in the ears occur giving typical tophi that are easily recognized.

In regard to the value of Uric Acid Metabolism studies, Christian points out that we are dealing with a substance which is present in the blood and in the urine in relatively very small quantities. Anything present in small quantities brings up the possibility of error in its determination. In the second place, we are dealing with a substance which in the blood is very difficult of quantitive determination, and there is still a question as to whether the methods available are satisfactory; or, to put it another way, other substances than uric acid may cause the same calorimetric changes which are used by Folin in his method of determining the uric acid.

In regard to the x-rays he states that we are justified in calling Gout only those cases in which there is the typical punched-out area in the bones with thickening in the bony substance around the area.

JAUNDICE WITH ENLARGED LIVER IN A YOUNG ADULT.

(Primary Carcinoma of the Gall-Bladder.)

By Thomas McGrae, M. D., F. R. C. P.

An example of this rare condition is reported, in the International Clinics for June, by McGrae.

The patient was a young man, age thirty years, who entered the hospital because of illness dating back five months. The trouble began with pain in the right side, loss in weight. Jaundice appeared about three weeks after his admission to the hospital. Physical examination showed prominence of the surface veins of the abdomen and fulness in the epigastrium was due to a firm mass with a dis-



Why Oats Differ

Oat flakes differ because oat grains differ. Some are large and plump and flavory. Some are small, starved and insipid.

In Quaker Oats we use the queen grains only. The rest are all sifted out. A bushel of choice oats yields but ten pounds of Quaker Oats.

That is why Quaker Oats has won millions of users. Why it holds leading place the world over.

No man has ever found a way to make an oat food better.

Quaker Oats

12c and 30c per package in United States and Canada, except in Far West and South where high freights may prohibit.

The Quaker Oats Company
Chicago

(1639)

tinct edge which came within 1 C. M. of the naval in the mid-line. The mass extended to the left beneath the left costal margin opposite the ninth rib. To the right it passed under the right costal margin and in the nipple line is felt below the costal margin on deep inspiration. The mass was smooth and hard and presented no irregularities. The gall-bladder was not felt. As active anti-syphilitic treatment had been tried before his admission to the hospital and the Wassermann test was negative, syphilis was ruled out. A moderate nucocytosis was present and the red cells slightly reduced in number.

After considering the various conditions which might account for the tumor mass, loss of weight, jaundice, etc., the diagnosis was correctly made by exclusion. The conditions considered were: Hyperthropic biliary cirrhosis of Hanot; Syphilis; portal cerrhosis; abscess, cholangeitis, angicoholitis and neoplasm. The latter seemed the most probably diagnosis. This was confirmed by an exploratory operation and later by autopsy.

The majority of the cases of primary carcinoma of the gall-bladder are associated with gall stones, the figures varying from 75 to 100 per cent. The case reported belongs to the exceptions.

SKIN GRAFTING.

By Arthur M. Shipley, M. D.

In a well illustrated article, in the International Clinics for June, Shipley describes the excellent results he has obtained in the treatment of chronic leg ulcers by the use of skin grafts. He employed the method described by John Staige Davis in the Journal of the American Medical Association, September 19, 1914.

Shipley reports eight cases of the obstinate type of leg ulcer in which complete success was obtained.

He recommends this method for the following:

First, the ease and the simplicity of the procedure.

Second, its uniform success if the proper precautions are taken in the preparation of the surfaces and the application of the grafts.

Third, the robust surface that is formed by the graft.

Fourth, the fact that the operation can be done without a general anaesthetic.

Fifth, the very rapid and remarkable filling up of the base of the ulcer to the level of the surrounding tissues.

The method is not available on an exposed surface like the face, unless the grafts are closely placed, otherwise the resulting surface has a spotted appearance.

DEPARTMENT OF COMMERCE.

Bureau of the Census
Washington

RAPID GROWTH OF THE BIRTH REGISTRATION AREA.

Washington, D. C., September 12, 1917—Congratulations to Maryland, Virginia, and Kentucky, the latest states to be admitted to the Registration Area for Births by the Director of the Census, Sam. L. Rogers.

The Registration Area for Births was established in 1915 and was then composed of ten states and the District of Columbia, representing 10 per cent. of the territorial extent of the United States but containing 31 per cent. of the country's population. For this area the Bureau of the census has recently issued its first annual report, entitled "Birth Statistics." As the area grows the annual reports will deal with the births in a constantly increasing portion of the country and will, therefore, become of

constantly increasing interest and value.

The outlook for a very rapid growth of this Registration Area for Births is so good that a word of cheer to the states outside should be given. The need of complete birth registration is recognized now as never before. The age of the soldier must be known, and so a new argument for birth registration comes to the United States. Since war was declared tests of the completeness of birth registration have been made by special agents of the Census Bureau in Virginia and Kentucky, and both these states secured a rating of over 90 per cent., which represents the degree of completeness required for admission to the area.

Similar tests are now being made in Indiana and New Jersey, and before the year is over will be conducted in North Carolina, Ohio, Utah, and Wisconsin. Several other states are nearly ready to seek admission, and it is by no means a wild prediction that the Birth Registration Area within the next two years will be more than trebled in size and will contain over two-thirds of the population of the United States.

One physician recently became so thoroughly aroused to the desirability of recording births that he reported to the local registrar 450 births which had occurred in his practice since 1900.

Parents and physicians everywhere are awakening to the importance of this matter and the fashion now is to register baby's birth.

WOUND DIPHTHERITIC INFECTION.

J. G. Fitzgerald and D. E. Robertson (Journal A. M. A., Sept. 8, 1917.) have studied and verified as diphtheritic a series of cases of wounded back from the war. Some of these may have acquired it from others but the remainder were in all probability being returned to Canada from overseas. Since it has been observed that possibly 1 or 2 per cent. of healthy persons are diphtheria carriers it is a matter of interest that only two of their diphtreitic subjects were found to be carriers. The treatment in all was practically the same. The men were isolated, given diphtheria antitoxin and strict asepsis observed in the dressings. The average stay in isolation was thirty days. It has been recommended that in future a routine bacteriologic examination of all suppurating wounds be made and that in no case should dressings of infected wounds be made without wearing rubber gloves.

VACCINE THERAPY.

Joseph L. Miller, Chicago (Journal A. M. A., Sept. 8, 1917), reviews the literature of vaccine therapy and gives the arguments and facts bearing on its nonspecific character, following with his own experience in 130 cases of arthritis using typhoid vaccine chiefly. In the majority of cases benefit was obtained and was in some cases quite striking. The disease varied from simple acute and subacute arthritis to severe and chronic cases. The chief difficulty, he says, in this form of therapy is the violence of the reaction and an important question is the relation of this reaction to the beneficial results of the foreign protein. The nature of the reaction has not been determined and it may be due solely to the temperature reaction and the various agencies of immunity excited by it. It is too early to state whether it is going to be a regular therapeutic procedure but it would seem that it cannot be entirely discarded. The chief objection to it is the danger of

grave or fatal reaction. Carelessness must be specially guarded against. It must be considered still in the experimental stage and not generally employed without careful consideration of the possible dangers. If used the toxicity of the particular vaccine must be determined and the patient carefully searched for cardiovascular pathologic conditions.

ANAPHYLACTIC SHOCK.

W. H. Manwaring and H. E. Crowe, Stanford University, Calif. (Journal A. M. A., Sept. 8, 1917), have investigated the role of the hepatic tissues in acute anaphylactic shock The livers of normal and anaphylactic guinea-pigs were repeatedly perfused with dilute foreign protein, either in Locke's solution or in defibrinated normal or anaphylactic blood. The resulting changes in the toxicity of the perfusion fluid were estimated by subsequent tests with isolated anaphylactic lungs. In making the pulmonary test, the ductus arteriosus is ligated, and a citrated cannula is tied into the pulmonary artery, delivering the perfusion fluid under constant pressure and temperature. After passing through the pulmonary blood vessels, the fluid is allowed to escape from the open left auricle. During the perfusion, the lungs are alternately expanded and allowed to collapse by air forced into the tracheal cannula, in a manner simulating the normal respiratory resistance to inflation, and in the promptness and completeness of the expirating collapse." In normal guinea-pig lungs thus perfused with Locke's solution of 50 per cent. defibrinated guinea-pig blood no distinct changes in the pulmonary elasticity are produced. If anaphylactic guinea-pig lungs are similarly tested they are thrown invariably into a typical anaphylactic response. If the liver of a normal guinea-pig is repeatedly perfused with 0.5 to 1 minim lethal fatal dose of foreign protein no distinct change in toxicity of the fluid is observed. The normal guinea-pig liver has no appreciable detoxicating or anaphylactic action on foreign protein either tested alone or with normal or anaphylactic blood, but the anaphylactic guinea-pig liver has a marked detoxicating or antianaphylactic action on a specific foreign blood protein mixture. On repeated passage through the anaphylactic liver the perfusion fluid not only loses its power to produce the anaphylactic pulmonary reaction but acquires a power of causing an unusual relaxtion or loss of tone in the pulmonary tissues. The detoxicating action of the anaphylactic liver is accompanied by and may possibly be due to an explosive formation or liberation of vasodilator and bronchodilator substances. This finding is in harmony with analyses of the anaphylactic action in the dog. "The agreement between the two findings would suggest that the explosive formation or liberation of vasodilator and bronchodilator substances by the sensitized liver is an essential feature of the acute anaphylactic reaction in all animals. The demonstration of a functional cooperation between the sensitized hepatic cells and certain circulating blood elements, the detoxication of foreign proteins, calls attention to the possibility of similar functional cooperations being operative in other antitoxic actions."

FATAL SUPERFICIAL BURNS AND THE SUPRARENALS.

A note on the recurrence of the suprarenal lesions in uncomplicated fatal cases of extensive superficial burns by H. G. Geiskotten, Syracuse, N. Y., appears in the Journal A. M. A., Sept. 8, 1917. His necropsy ex-

perience has shown that in addition to the lesions usually mentioned, cloudy swelling of the liver and kidneys, focal degeneration of splenic nodules and degenerative changes in lymph nodes and intestinal lymph nodules there occur also characteristic changes in the suprarenals which are the most prominent of all. The suprarenals are markedly swollen and deep red. The surrounding fat tissues show marked edema and on section certain areas suggest extensive hemorrhage obliterating the normal markings and in other parts the cortex and medulla seem markedly swollen and reddish streaks suggest congestion of the blood vessels. "On microscopic examination, there is evident marked congestion of the blood vessels with scattered areas of hemorrhage penetrating among the parenchymal cells. The gland cells are pale staining and much swollen. Many are apparently undergoing hydropic degeneration. Necrotic cells being invaded by polymorphonuclear and endothelial leukocyets are not infrequent. The picture in general is more or less comparable to the central necrosis occurring in the liver of the guinea-pig in chloroform poisoning, except that in the suprarenals the process is diffuse." Kolosko has described similar appearances in the suprarenal in a number of cases of extensive superficial burns and interprets them as hemorrhagic infarctions of the glands, but as far as Weiskotten knows marked changes of this character in the suprarenal glands have not been observed in any other condition, at least in man, and they would seem the best anatomic evidence that death may be due to the action of the specific toxin originating probably in the burned areas. They are somewhat comparable to the changes seen in the suprarenals of guinea-pigs poisoned by diphtheria toxin.



Bran Food
As You Want It

Here is a dish which for 20 years has been a favorite morning dainty.

It is soft wheat rolled—a dish which meets a universal taste.

Into those flakes we now roll 25 per cent of bran. The bran is in flake form to make it doubly efficient.

Certainly no other bran food is today so widely advised by physicians. And a food could not be better fitted to foster the bran habit.

Pettijohn's

Rolled Wheat—25% Bran

A breakfast dainty whose flavory flakes hide 25 per cent unground bran.

Pettijohn's Flour—75 per cent fine patent flour with 25 per cent bran flakes. Use like Graham flour in any recipe.

Both sold in packages only.

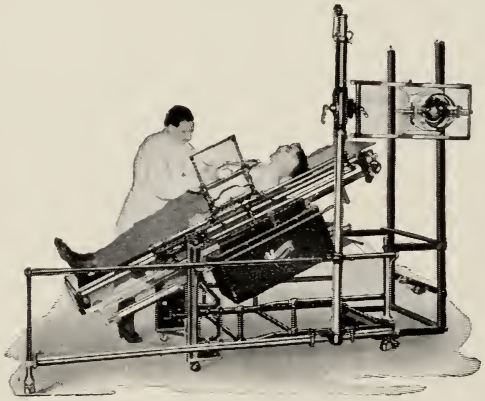
(1649)

VICTOR

—For Personal Efficiency

Every Surgeon and Every Physician

should make available to himself the help of *Roentgen Diagnosis.* It is a duty he owes to the community which he serves, and is a measure of preparedness for possible emergency in these war times.



ONE MODEL OF VICTOR ROENTGEN APPARATUS

Besides utilizing the services of a reliable professional Roentgenologist, the physician and the surgeon should himself become somewhat of a *Roentgen Diagnostician.*

Every community is entitled to the best possible diagnostic service. There is no moral excuse nor legal extenuation for not having it.

The professional Roentgenologist, as a *Consulting Diagnostician,* is in position to be of invaluable aid to the Surgeon, the Internist, the General Practitioner, the Orthopedist, the Dentist, the Proctologist, the Urologist, the Gastro-Enterologist, the Ophthalmologist, the Otologist, the Rhinologist—every medical practitioner.

Catalog literature and clinical data pertaining to any phase of roentgenology, electro-medical or physical therapeutics, will be furnished on request—and without obligation.

VICTOR ELECTRIC CORPORATION

Manufacturers of Roentgen, Electro-Medical and Physical Therapeutic Apparatus

CHICAGO 236 S. Robey St.
CAMBRIDGE, MASS. 66 Broadway
NEW YORK 131 E. 23rd St.

Territorial Sales Distributors:

NEW YORK
Victor Electric Corporation
131 E. 23rd Street

ATLANTA
J. G. Baldwin
712 Peters Bldg.

The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, $2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.
J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.
WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital, Boston, Mass.

OBSTETRICS AND GYNECOLOGY.
ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY
M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.
G. T. TYLER, M. D., Greenville, S. C.
R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.
J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.
E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

STATE BOARD OF HEALTH NOTES.

The State Board of Health met in Columbia, September 27th, at 9:30 o'clock A. M., with the following members present: Dr. Robert Wilson Chairman, Drs. C. C. Gambrell, W. M. Dodson, William Egleston, W. M. Lester, E. A. Hines, D. B. Frontis, and James A Hayne Secretary and State Health Officer.

The ordinary routine business was transacted as usual at the quarterly meetings and in addition a conference was held with Dr. Simpson of the United States Public Health Service in reference to the cooperation of the Board in sanitation around the cantonments of this State.

Mrs. Annie Rembert who has done such effective Tuberculosis campaign work throughout the State presented her resignation which was accepted with regret.

Dr. E. A. Hines was elected a delegate to represent the Board at the meeting of the American Association for the Study and Prevention of Infant Mortality at Richmond, Virginia, October 15-17.

The Board will also be represented at the American Public Health Association in Washington, October 17-20 by Drs. C. C. Gambrell, William Egleston, James A. Hayne, F. A. Coward.

Dr. L. A. Riser, the assistant Secretary of the Board and Director of Rural Sanitation, was given assurances of the Board's cooperation in continuing the intensive campaign in the various Counties for the furtherance of Rural Sanitation work.

The Board adjourned to meet in December for the purpose of receiving annual reports and other routine business.

MEDICAL RESERVE CORPS.

The following candidates have been examined by Dr. F. A. Coward Columbia, S. C., for Medical Reserve Corps since August 2nd, 1917.

Dr. A. L. Little, Blacksburg, S. C.
Dr. J. H. Brodie, Wagner, S. C.
Dr. W. W. Webb, Wagner, S. C.
Dr. J. D. Eaddy, Greenville, S. C.
Dr. Sanders, (Dentist)
Dr. G. T. Mansel, Spartanburg, S. C., (Colored).
Dr. Collins, Columbia, S. C., (Dentist) (Colored).
Dr. H. M. Ross, Chester, S. C.
Dr. Brockington, (Dentist.)
Dr. G. C. Bohm, Neeses, S. C.
Dr. S. H. Black, Rock Hill, S. C., (Dentist.)
Dr. G. L. Williams (Dentist.)
Dr. J. M. Bearden, Laurens, S. C.
Dr. J. R. McAlhany, Branchville, S. C., (Dentist.(
Dr. R. H. Newson, Ruby, S. C.
Dr. J. H. Ellerbe, Ellerbe, N. C., (Dentist.)
Dr. J. R. Funderburk, Lancaster, S. C., (Dentist.)
Dr. W. S. Lynch, Scranton, S. C.
Dr. E. C. L. Adams, Columbia, S. C.
Dr. D. B. Lancaster, (Dentist.)
Dr. T. H. Symmes, St. Mathews, S. C.
Dr. L. W. Busbee, Springfield, (Dentist.)
Dr R. E. Stevenson, Camden, S. C., (Dentist.)
Dr. L. W. Wood, Greer, R. F. D. No. 1.
Dr. J. W. Jervey, Greenville, S. C.
Dr. Draffin, Columbia, S. C., (Dentist.)
Dr. O. H. Purvis, Cheraw, S. C.
Dr. J. W. Henegan, St. Mathews, (Veterinary.)
Dr. W. E. Turner, Wellford, S. C., (Dentist.)
Dr. J. P. Jewell, Piedmont, S. C.
Dr. P. H. McDonald, Georgetown, S. C., (Dentist.)
Dr. J. R. Thompson, Anderson, S. C., (Dentist.)
Dr. J. H. Saye, Sharon, S. C.
Dr. J. Buddin, Timmonsville, S. C., (Dentist.)
Dr. C. C. Stanley, Columbia, S. C., (Dentist.)
Dr. L. D. Boone, Rowesville, S. C.
Dr. R. T. Ferguson, Gaffney, S. C.
Dr. J. A. Dillard, Atlanta, Ga.
Dr. C. P. Benson, Travelers, Rest, S. C.
Dr. J. E. Thomas, Jefferson, S. C.
Dr. M. P. Moorer, Georgetown, S. C.

THE SOUTHERN MEDICAL ASSOCIATION.

The Southern Medical Association meets at Memphis, Tenn., November 12-15. It will be a great war convention. We call attention to several other features namely, the Malaria Conference which is of such great importance now owing to the vast number of soldiers being trained in the South. Then there is a section on Railway Surgery. There is a new section on Pediatrics which will meet on November 12th.

One of the most progressive and far reaching sections so far as we are concerned in the South is that on Public Health. It is indeed a vigorous feature of the meeting.

We urge every one of our members who can possibly do so, to plan now for attendance.

SPARTANBURG COUNTY HOSPITAL.

As we go to press we learn of the success of the vote in favor of the extra levy to establish a General Hospital in Spartanburg. We understand the proposition was carried by a safe majority. The Spartanburg Hospital and the Good Samaritan Hospital now a successful hospital, will be emerged and their stock paid by the county.

It is estimated that the General Hospital will cost approximately two hundred thousand dollars. The extra tax levy will provide one-half of this amount. The success of this movement or organi-

zation will cause many other counties in the State to take just such steps. A good hospital not only is an infinite benefit to the public at large, but it is a wonderful post graduate instruction for the medical profession. The result at Spartanburg was not brought about in a day, it came after years of agitation.

ORIGINAL ARTICLES

THE ROENTGEN RAY DIAGNOSIS OF CHRONIC APPENDICITIS.

By A. Robert Taft, M. D., Charleston, S. C.

THE diagnosis of Chronic Appendicitis according to our reports from the larger hospitals, where every modern method can be applied, is far from perfect. Dr. Codman is quoted by Dr. Imboden in an article on this as stating that in a series of 98 cases operated on, 24 normal appendices were found.

Dr. Morris states "So many ineffective appendectomies are done upon a basis of incomplete diagnosis, some of us must call a halt." Dr. Connell before the American Medical Association states out of 212 cases operated on for chronic appendicitis 87 or 41 per cent. were not relieved of their symptoms.

The Roentgen diagnosis like all other forms of laboratory work only furnishes one more in the chain of symptoms and should never be depended on to the exclusion of other methods. But when we can demonstrate our ability to visualize the appendix with fluorescope and plate. To see any abnormalities of position, shape, adhesions, tenderness, stasis, etc. To see if the pain in right iliac fossa is in the appendix by palpation while looking, the profession it seems to me cannot but acknowledge that we have the most valuable method of diagnosis yet devised.

Dr. Skinner in a recent review of the literature of the subject quotes literature to show that various operators believe that the normal appendix does not fill with Barium. I believe that the failure to fill and show an appendix as George and Gerber point out if a rather old buttermilk is used as medium, means an absent appendix, previous inflammation obliterating the lumen, faecal masses or concretions preventing filling, a retrocaecal appendix and this may be brought into view with the fluoroscope unless adherent. And as these authors state "We believe there is no exception."

How many cases have in the past been operated on for this condition, and have been really ureteral calculus, hernia, pneumonia, typhoid fever, kinks, veils, etc., which might have been diagnosed by good team work between the Internist, Surgeon and Roentgenologist.

A case was recently referred to me by Dr. Garton of the U. S. Navy yard. A marine who gave the history of 18 months ago at one of the large centers having undergone the removal of an appendix for persistent digestive disturbances. At the time he sought assistance from Dr. Garton the digestive disturbances were worse and he was suffering from symptoms of partial intestinal obstruction. The X-Ray showed the seat of obstruction to be in the upper part of ascending colon, with an immensely dilated caecum. Dr. Garton operated and found an omental hernia producing this obstruction. The patient made a good recovery and when last seen was feeling fine.

In a case referred by J. W. Burn we were able to demonstrate that the patient had not only a chronic appendix, but the

Read before the South Carolina Medical Association, Spartanburg, S. C., April 18, 1917.

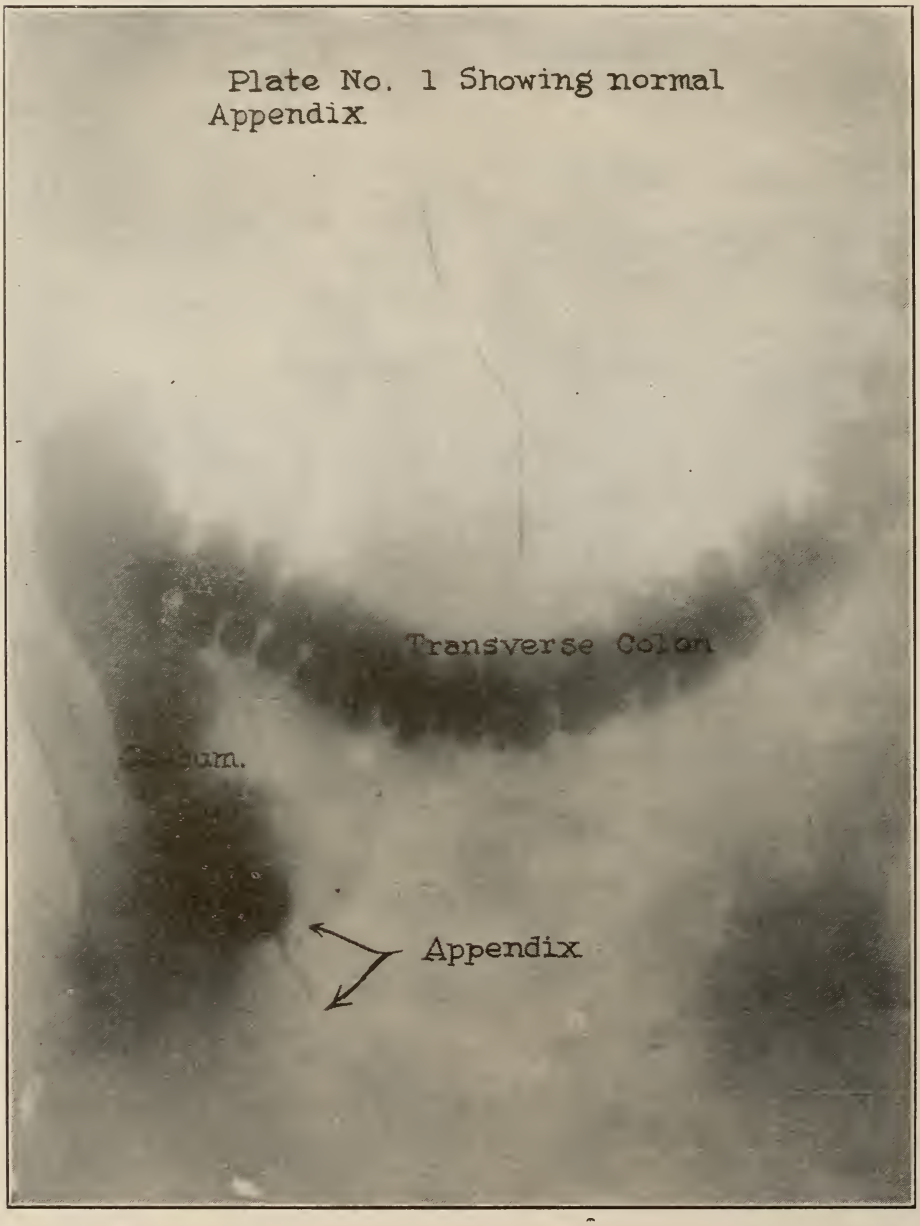

Plate No. 1 Showing normal
Appendix
Transverse Colon
Appendix


Plate No. 2.
sigmoid
Appendix

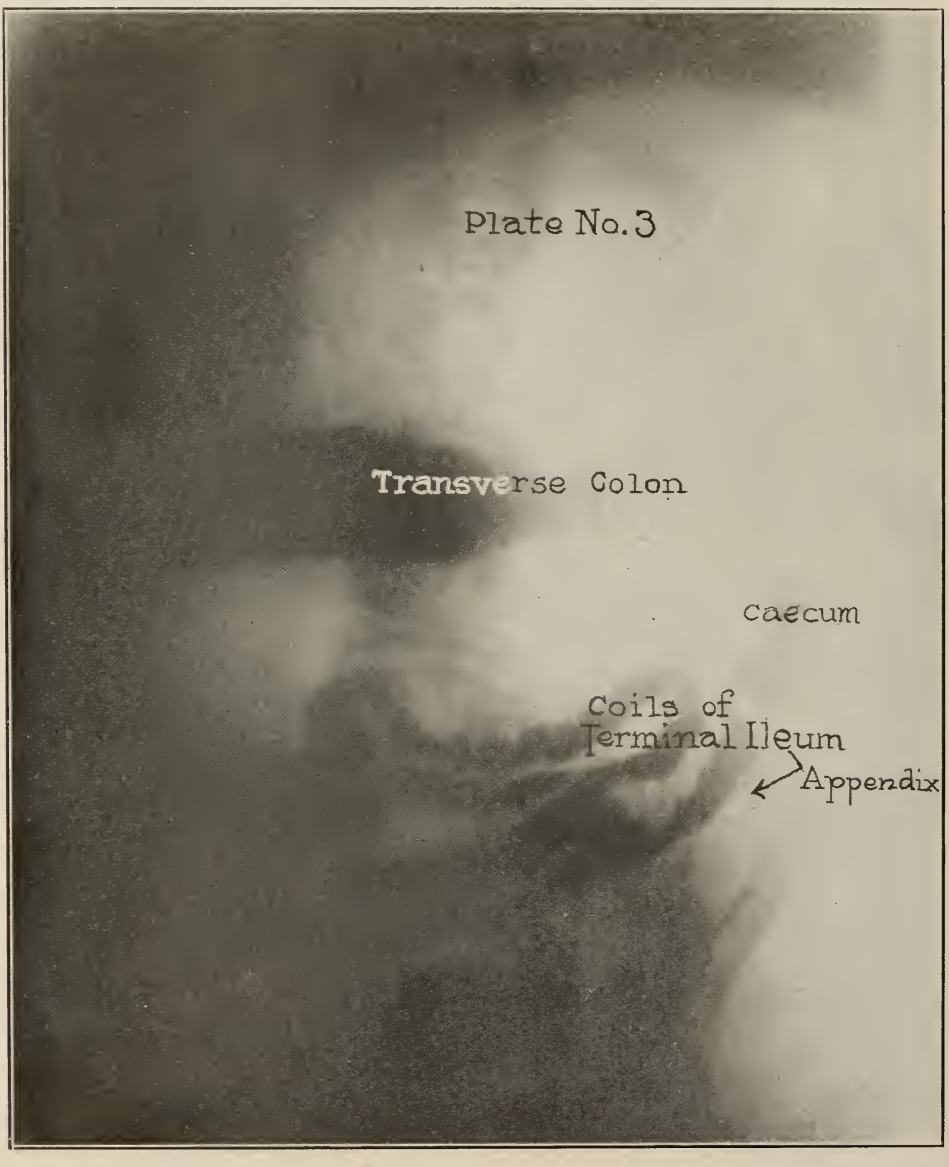

Plate No. 3
Transverse Colon
Caecum
Coils of
Terminal Ileum
Appendix


Plate No. 4.
Appen-
dix

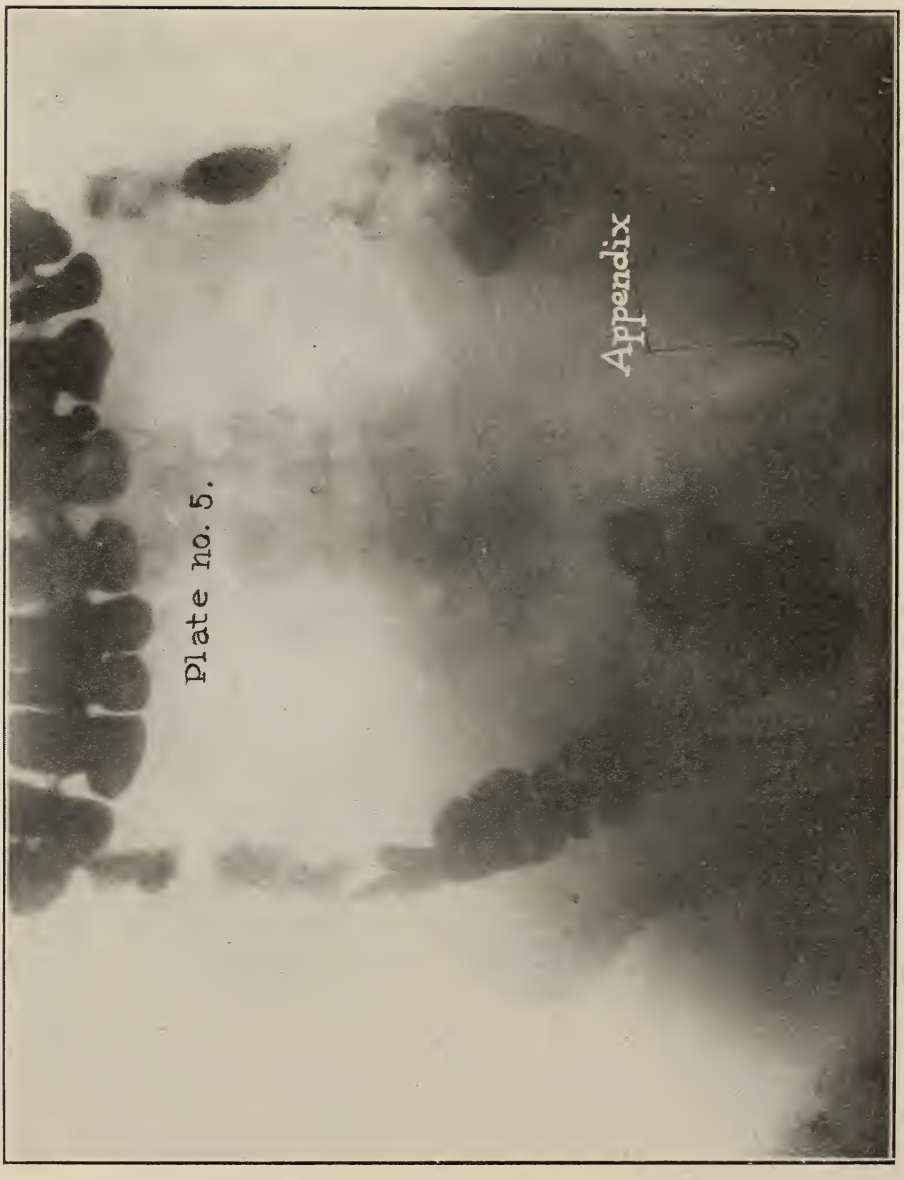


Plate no. 5.


Cardiac end of Stomach
Plate No. 6
Stomach
Ulcer of Duodenum
Appendix.

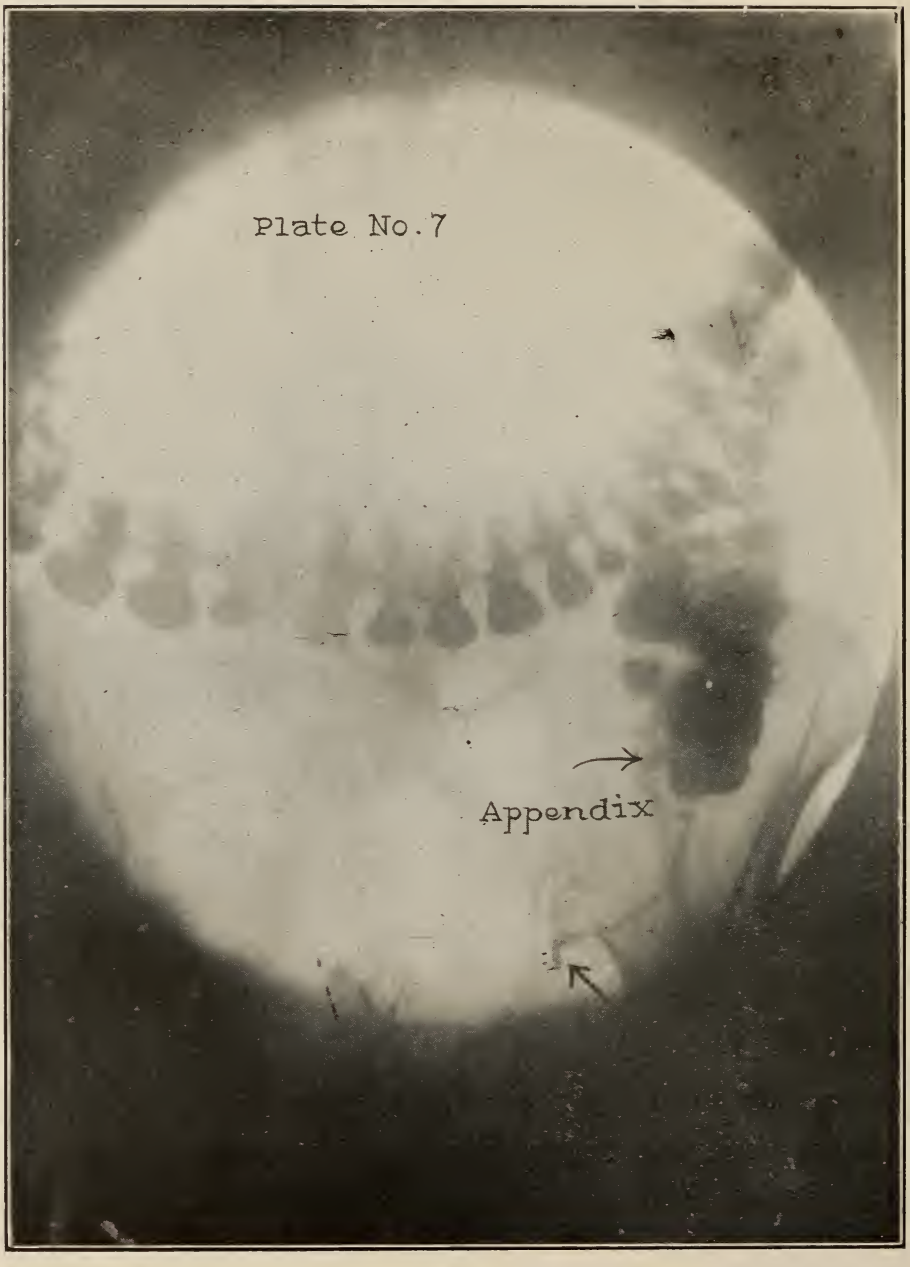
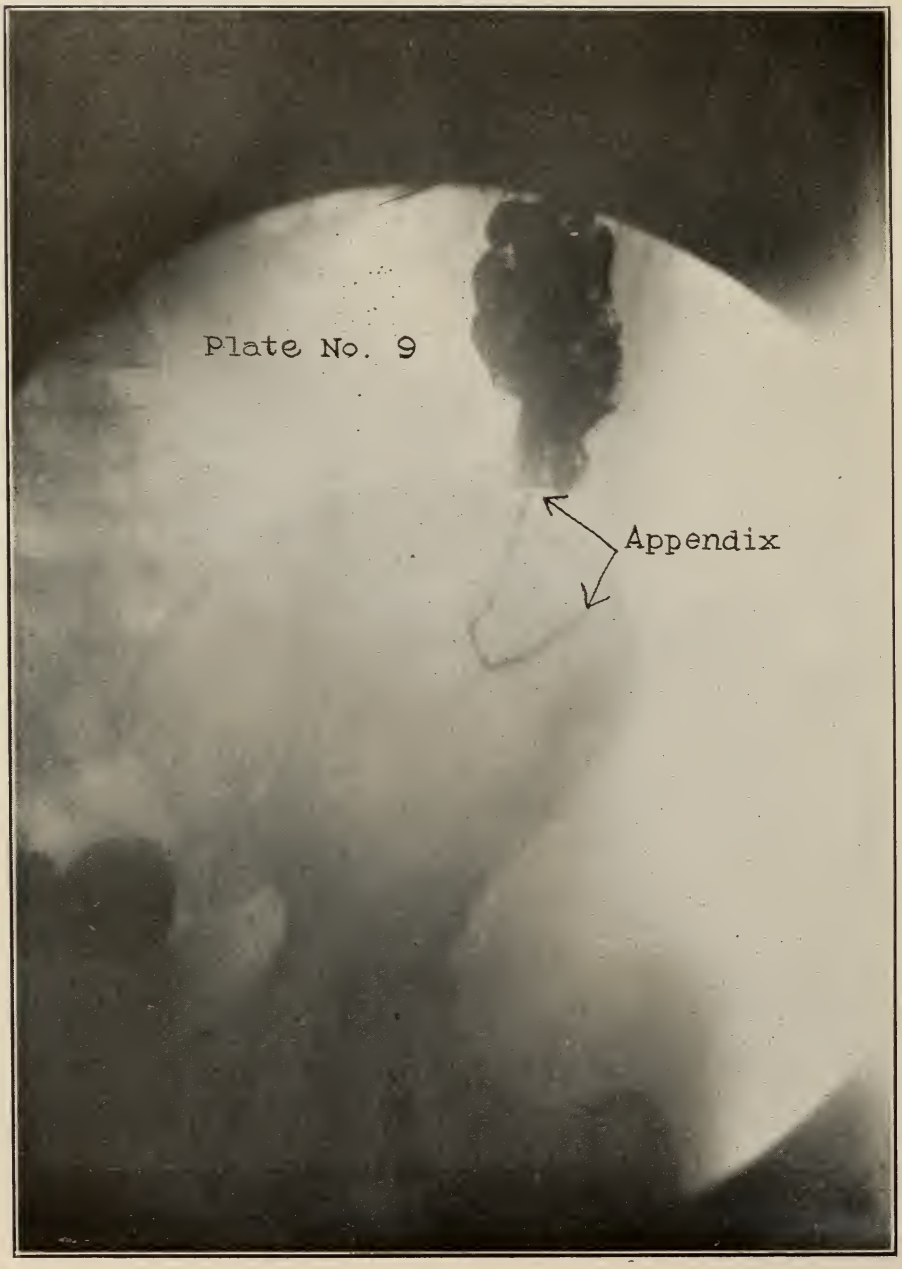

Plate No. 7
Appendix


Plate No. 8.
APPENDIX


Plate No. 9
Appendix

ascending colon was pulled down and adherent to transverse colon. This was verified by Dr. Baker at the operation and we all felt that a simple appendix operation as would have been done without the added information derived from the X-Ray would have been inadequate to have relieved the condition.

The technique is usually to examine 12 to 24 hours after giving Barium by mouth. Sometimes a Barium enema is used but I prefer the meal. The X-Ray is practically never used for the diagnosis of acute appendicitis. It may be used by enema as suggested by Dr. Case to show appendix when in severe acute case the pain is on the left from a transposed appendix.

I have demonstrated the appendix filled with pus lying across the gas distended sigmoid in an acute case with very obscure symptoms. This case was referred by Dr. Jagar and Dr. Robert Wilson it was very indefinite in symptoms and the X-Ray was of service. The case was operated on by Dr. Baker and diagnosis confirmed. This however was an accidental finding and one that I probably would never be able to repeat. As the contents of the Caecum normally escape into the appendix so the Barium from the buttermilk meal fills and may be shown. The appendix however should empty at the time the caecum does and stasis means abnormality. This stasis may in extreme cases last for days. In a case referred by Dr. Buist and afterwards operated on by him, I took the appendix when taken out and placing it on a photograph plate made an exposure. The lumen was still full of Barium three days after the meal had been taken, and I was able to demonstrate it very clearly at a meeting of the South Carolina Medical Association by a lantern slide still in my collection. An appendix showing stasis means an unhealthy condition of the lining mucous membrane, a point of low resistance and very likely place for a focal infection.

The signs of chronic appendix are:

(1) Absence of appendix shadow.

(2) Tenderness.

(3) Abnormal condition of position, shape and size of lumen.

(4) Adhesions.

(5) Stasis.

(6) Patent ileocaecal valve(?)

No. 1 shows a normal appendix. This hangs free and shows no abnormality, of filling, size, or tenderness.

No. 2 shows very large appendix. Draining poorly (Caecum is empty and appendix still full. Patient referred by Dr. Pearlstine with symptoms of constipation and autointoxication. Relieved by operation.

No. 3, Chronic appendix with patent Ileo-caecal valve.

No. 4 referred by Dr. Maybank, for confirmation of diagnosis of "Chronic appendicitis." This case had been diagnosed as gall-stones in New York. At operation by Dr. Baker our diagnosis of adherent chronic appendix was confirmed and normal gall-bladder was found.

No. 5, Case referred by Dr. Cannon. Symptons almost typical of Duodenal ulcer. Dr. Cathcart and Dr. Cannon were able to confirm "Appendix" diagnosis at operation. This appendix was exceptionally long.

No. 6, Case referred by Dr. Robert Wilson and operated on by Dr. Cathcart. Case had clinical symptoms of Chronic appendix.

X-Ray showed normal free appendix and ulcer of Duodenum. Confirmed at operation.

No. 7, Typical diseased appendix. Kinked and adherent about one-third down and adherent bulbous end.

No. 8, Case referred by Dr. Buist. Partial obliteration of lumen by adhesion marked digestive symptoms.

No. 9, Long appendix adherent against pelvic wall. This case was referred by Dr.

Deas from Baker Sanitarium. Patient had attacks of vomiting and complained of much chronic indigestion. Had been treated at various places by stomach irrigations, etc. Routine X-Ray examination led to finding bad appendix. This removed and one year later the patient sent us word he had had no more digestive disturbances.

These are only a few out of a series of 58 cases diagnosed within the past 18 months of which 47 were operated on.

In closing I would like to further emphasise the point that the finding of an abnormal appendix is not sufficient to make a diagnosis but a positive or negative report can't fail to be of value to the diagnostician who is trying to use every available means to make a diagnosis.

THE USE OF DAKIN'S SOLUTION IN GANGRENOUS ENDOMETRITIS, FOLLOWING PUERPERAL SEPSIS.

By Belton J. Workman, M.D., Roper Hospital, Charleston, S. C.

IN the present era of progressive medicine many and various theories have been advanced for the eradication of "infections." As a result of many years of research work, the development of Bacteriology, Pathology, the discovery and invention of delicate laboratory methods and instruments, the light is slowly dawning on this vast field of darkness, in which are found the etiological factors of untold suffering and many deaths. During the course of the present war, there are opportunities presenting themselves for the study and observation of this vital question "Infection's;" already much has been learned, especially in the use of Dakin's Solution as a germicide, the use of which may prove to be of untold value. As long as the infected area can be controlled, the infection kept localized by nature sending forth its thousands of leukocytes to act as a barrier, we can expect to be soon victorious in the eradication of such an infection.

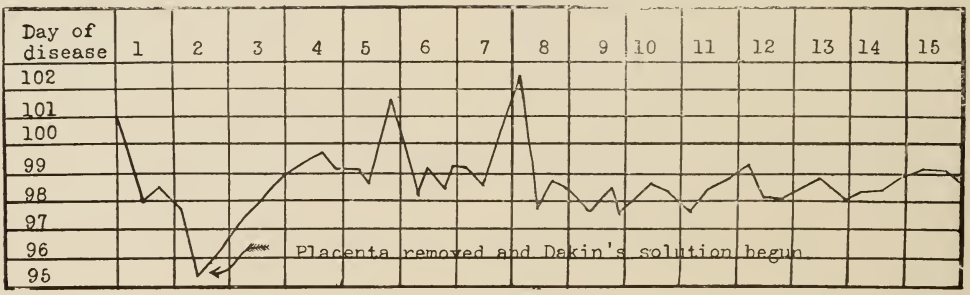
In the consideration of infections of the female organs of generation, we have quite a difficult obstacle to overcome, that is to keep the infection so localized, at the same time eradicate the infection before it can get into the general circulation or spread into the adbominal cavity by way of the lymphatics. Never have greater strides been made in medicine than when Semmelweiss in 1847, announced to the medical profession the methods of prevention of puerperal sepsis. Even with our present knowledge of Bacteriology there sometime occurs the same puerperal sepsis; whether this is due to ignorance or to neglect we have it on the conscience of the practitioner. In order to fully understand this condition we must keep in mind the pathological changes that are taking place in an infected uterus; the bacteria by their presence and their toxins they produce, irritate the tissues and a protective serum is thrown out, leukocytes hurry to the scene and there is an exudate formed in the infected area. The bacteria pass along the line of least resistance, which are the natural planes of cleavage of the pelvic connective tissue. The inflamatory exudate therefore following the infection will extend in certain directions, passing along the planes of fascia surrounding and embedding the hollow pelvic organs. We must also remember the condition of the uterine cavity immediately after delivery, with its bleeding raw surfaces and its large gaping, thrombosed placental sinuses, it becomes apparent that pathogenic bacteria introduced during labor can easily find entry into the walls and one can readily see that an ideal culture media is prepared by nature for their reception and propagation. If infection occurs the endometrium may become converted into a gangrenous, sloughing area, made up of necrotic material and decidual debris which is bathed with a

bloody purulent discharge. The necrotic material soon takes on a dirty yellowish green appearance and in many instances ulcerating surfaces occur, while the infection goes deeper into the muscular tissue of the uterus. The amount of necrotic material produced is often enormous and may recur with great rapidity after its removal.

In considering such infections I wish to refer to a case recently treated in the obstetrical ward of Roper Hospital, Charleston, S. C., during the service of Dr. G. Fraser Wilson. An adult negro female, multipara, age 33, temperature of 105 degrees F., was seen by the city physician, the diagnosis of retained placenta was made, the patient was sent to the hospital for treatment. At the time of admission the temperature was 101 degrees F., pulse 124, respiration 29, and there was very little hemorrhage from the uterus. The patient was immediately put to bed; and after the usual preparation was carried to the operating room and placed in a lithotomy position. The vagina was packed as outlined by DeLee. A Sims speculum was introduced into the vagina, a small piece of gauze was placed in the cervix, small rolls of absorbent cotton about three inches in length, moistened with 5 per cent. solution of lysol was used in packing the vagina, first packing around the cervix and then packing the vagina firmly in a simular way. This method is used in the hope of producing enough irritation so that the uterus will expel the placenta, secondly to soften the cervix in order that the placenta may be removed, and lastly to lessen the dangers of hemorrhage. At this time the laboratory reports showed the urine to contain albumen, granular casts, pus and blood cells. It is evident that there was changes going on in the kidneys which made the prognosis more serious. The blood count revealed a high leukocytosis, also a high percentage of polymorphonuclear neutrophiles, which shows a severe infection and a fair resistance on the part of the patient. After twenty-four hours the patient was not doing so well, the temperature being 95 degrees F., pulse 126, respiration 30, which would lead us to think that the resistive powers of the patient were being overwhelmed by the destructiveagents. Immediately the patient was carried to the operating room, given an anesthetic, the vaginal packing removed, but contrary to our wishes the placenta had not been expelled. A vaginal speculum was introduced, the cervix pulled down with a tenaculum, and the anterior lip of the cervix was found to be lacerated, gangrenous and sloughing. The placenta which showed evidence of necrosis was removed with the aid of placental forceps, and there was present a terrific foul smelling odor. The uterus and vagina were swabbed out with equal parts of tincture of iodine and alcohol. Just what was the cause of the cervix being lacerated and gangrenous we were unable to determine, but the prognosis seemed to be very bad.

The patient was put to bed in Fowler's position in order to promote drainage and to keep the infection localized in the pelvis, and was also given one dram of fluid extract of ergot every four hours, this being given to keep the uterine muscles contracted and to prevent the infection from spreading to the surrounding tissues. We at once decided to use Dakin's solution as an intra-uterine application. The preparation of Dakin's solution as now in use can be made by a competent chemist or druggist at a minimum cost. According to recent literature the solution of sodium hypochlorite for surgical use must be free from caustic alkali; it must only contain 0.45 to 0.50 per cent of hypochlorite. Under 0.45 per cent is not active enough and above 0.50 per cent. is irritating. A curved glass douche tip was secured which had a small perforated bulb on the end. The patient was placed in a litho-

tomy position, and using every aseptic precaution a vaginal speculum was introduced, the cervix pulled down with a tenaculum and the glass douche tip introduced. This glass douche tip was connected to the sterilized rubber tubing which led to the irrigator containing Dakin's solution. The douche tip was held in place by means of adhesive strips fastened to the lower abdomen and also to the douche tube. The tissues surrounding the vulva were kept greased with petrolatum to prevent irritation of the skin. A long rubber sheet was placed under the patient, and so arranged that the returning drainage from the uterus would be collected in a jar at the foot of the bed. The Dakin's solution was allowed to pass into the uterus every four hours, the amount being determined by the size of the uterus and the pathological condition existing. However the flow should be so regulated that the tissues would be constantly bathed with the solution, with the idea in view of destroying any infection that may have been present, and also in hopes this would be a factor in causing the sloughing of the necrotic tissue and to stimulate the formation of healthy granulations. In the course of several hours the temperature began to decrease and within thirty-six hours it was practically normal, the patient was in a much improved condition. Below is a chart which will illustrate the temperature.



The woman continued to improve, nutritious diet was allowed and laxatives were given when indicated. On the third day the patient was carried to the operating room, a warm uterine douche of weak iodine solution was given, as a result of which much necrotic material was removed from the uterus, large amounts of the gangrenous tissue had sloughed, and signs of new granulating tissue were present. The Dakin's solution was still continued for five days longer, the patient was given a full diet and made a rapid uneventful recovery, being discharged from the hospital fifteen days after admission.

We know that chlorinated lime is probably one of the oldest chemicals known to medical science, for when the prevention of puerperal sepsis was first discovered, it was used as a disinfectant for the hands; but the discovery of a combination of this chemical which warrants of its safe use, without destruction of the living cells, no doubt will mark the stepping stones in its use. Dakin's solution must be freshly prepared as it soon looses its germicidal power; it is best kept in dark colored bottles. If there should be complaint of burning or pain the treatment should be stopped and the method of preparation of the solution be investigated. The laws of asepsis must be strictly observed, for it would be useless to try to destroy an infection, when the infected field is continually being reinfected. It is absolutely necessary to continue the Dakin's solution until the infection is destroyed and healthy granulating tissues appear.

However, we do not claim Dakin's solution is indicated in every case where

there is infection of the uterus, but we do believe in conditions similar to the above, that it is of untold value to these unfortunate patients, or perhaps in these cases the words of Osler are rather appropriate "The needless deaths of peace."
Charleston, S. C.
Sept. 15th, 1917.

UTERINE EVACUATIONS. ELECTIVE AND ENFORCED. THE CESARIAN AND PORRO OPERATIONS. CASE REPORTS.

By Samuel Orr Black, A. B., M. D., Fellow Mayo Foundation, Rochester, Minn.

IN a negro cabin 9½ miles from Spartanburg, S. C., upon a table used for washing and storing kitchen utensils, the writer did his first Cesarian section operation.

The patient was a primipara, colored, aged 32, almost seven months pregnant.

For a few days prior to the operation she had complained of headaches, slight nausea, flashes of light before her eyes, and had noticed a swelling of her feet and ankles.

At five o'clock one morning in July, 1916, she had awakened with a full grown eclamptic convulsion. It recurred again and again in the forenoon, notwithstanding active medical treatment. By noon she had had eight of these attacks and was thought to be growing rapidly worse. Drs. Vernon and Moore asked us to see her in consultation and within an hour we arrived at her home.

She was partially unconscious, had a high bounding pulse, a general anasarca, hard rigid **non** dilatable cervix, a child lying in the second position, vertex presentation, with inaudible heart sounds. Operation was advised and readily agreed to by her husband.

Having as nearly as possible transformed a bed room into one suitable for major surgery, the patient was etherized in bed and then placed on our hastily improvised operating table, which necessitated strengthening by nailing several thin slabs from the legs of one side to the legs of the other. The table was then heightened by placing a brick beneath each leg.

Her abdomen was incised, the uterus delivered, opened, emptied, and the operation finished in the usual manner. In thirty-five minutes the entire procedure was over and the patient placed back in bed.

The mother had a comparatively easy recovery, but at the end of two and one-half weeks the child died, having then lived longer than we had expected as it had been carried less than seven months in its mother's womb.

Children born of an eclamptic mother are all toxic and most of them die. Necropsy reveals spots of parenchymatons degeneration and hemorrhagic foci in the brain, heart, kidneys, liver and muscles.

Cesarian section babies taken from a non toxic mother at, or close to term usually do well and are characterized by a rather nicely developed and well rounded head. In nine successive cases we have noticed the striking symmetry in these babies heads. This is due to the absence of a long and forced birth pressure.

Most premature children which die when born of a non toxic mother, do so from a want of fluid. This is occasionally due to an unnecessary degree of artificial warmth which induces a too profuse degree of perspiration. This combined with the fluid passed from the bladder as well as from the bowel exceeds the amount of intake.

Such, of course, can be readily prevented by proper mouth feedings, rectal enemata, and a careful regulation of the baby's temperature.

Celio-hysterotomies may be performed either thru the abdomen or thru the vagina. The former is by far the easier

and the more serviceable of the two routes.

As regards time, these operations are of two classes. First the emergency or enforced section, and second the elective section. The latter permits careful study and preparation of the patient and keeps the operating mortality under one per cent.

The former is done many times more frequently, but here because of the grave indications which necessitate the section, the mortality is much higher.

It does not make a great deal of difference as to whether the operator does or does not deliver the uterus before emptying it, nor does it matter materially as to whether the operation be performed thru the peritoneum or outside of it, as advocated by Barton Cook Hirst. A careful study of the records of the men using these different techniques clearly proves these assertions. The percentage of cures is about the same in each, the number of infections from the amniotic fluid is practically nil in all, and the post operative convalescence is neither shorter nor easier in the one than it is in the other.

In this country the transperitoneal abdominal route is the one most generally used. It readily enables one to do either a complete hysterectomy or a Porro operation, if either be found necessary after opening the abdomen.

These cases differ from other abdominal operations in that there are two lives at stake instead of one, and this should stimulate the surgeon to a still further nicety in his work.

The principal indications for section are (1) Contracted and deformed pelves, (2) Placenta praevia, (3) Premature separation of a normally situated placenta, (4) Fibroid uteri (some cases) (5) Mechanical obstruction in the pelvis or vagina from tumors or cysts, (6) absolute uterine inertia, (7) Suspected infections in some abnormal presentations, (8) and some cases of Toxemia of Pregnancy with or without convulsions.

In clean cases when the operation can be done at an elective time with good hospital or domestic surroundings the operating mortality compares favorably with that of any of the ordinary laparotomies.

It is in the infected cases or in those where the mother has lost a large amount of blood from hemorrhage that the mortality is higher. Even here, in the former type of case, it can be considerably reduced by means of a complete hysterectomy with adequate drainage, or perhaps, better still, by a Porro section. When done for hemorrhage one should always give large quantities of saline beneath the skin or into a vein. The Porro operation though all but forgotten by most American surgeons, is nevertheless a good procedure and is still extensively used in the Jefferson Hospital obstetrical department. Prof. E. P. Davis is positive that it has saved many mothers who otherwise would have perished from dreadful and almost overwhelming infections.

The operation should be preceded by catheterization, gastric lavage and a high copious rectal irrigation. During the operation 25 or 30 ounces of saline should be administered subcutaneously or intravenously and following it, another gastric douche is advisable to facilitate elimination and to prevent or lessen post operative ether vomiting. During the next few days hypodermoclysis and bowel irrigation should be routinely ordered. The dressings are to be changed as needed and the clamp is left in situ till sloughing is complete. It is well to dust equal parts of tannic acid powder and idoform on the stump of the cervix.

In cases where the patient is almost exsanguinated prior to operation, blood transfusion is preferable to the introduction of normal physiologic salt solution.

As soon as either the simple Cesarian or the Porro section be completed, it is

always wise to thoroughly cleanse the vagina of blood clots by means of a wet cotton sponge.

In cases of placenta praevia there is nothing which gives such uniform results as regards the life of both the mother and child as does the section. So true is this that the writer is thoroughly convinced that practically all cases of placenta praevia should be treated in this manner.

Version with rapid or delayed extraction, and vaginal tampons, have in the past saved a small percentage of these cases, but the risk is always great for the mother and is practically certain death for the child.

All cases of placenta praevia are uterine emergencies. To illustrate the point. When I was house surgeon for Dr. E. P. Davis in the Jefferson Hospital, Philadelphia, there was a patient admitted to his service who had lost but one tea cup of blood. Her general condition was excellent and the operation was to have been postponed for four hours, he being out of the city for that time.

However, appreciating the possibilities she was placed on the delivery bed in the operating room, which was ordered to be immediately prepared. Within an hour the patient had an enormous hemorrhage. The bed was soaked, the pulse rate jumped to 150 per minute, her pallor became extreme and it was thought that she would perish. Fortunately, everything being in readiness, she was saved by prompt surgical interference, plus a quart and a half of saline given intravenously during the operation.

Today, this woman owes her life to the judgment of her family physician who correctly diagnosticated her condition and recognizing its dangers sent her to the hospital at the earliest possible moment.

A placenta situated normally, but with premature separation from its uterine attachment, due to "blind" bleeding with concomitant blood clot formation, has the same potential dangers as does a placenta praevia. Fortunately in these cases, the bleeding announces itself thru pain, and is characterized by an oozing nature early in the process, in the majority of cases. If detected promptly, it frequently can be arrested by morphia, ice bags, and absolute quiet. Once it gets well under way however, and the mother begins to show the effects of hemorrhage, the uterus should be sectioned at once.

Deformed pelves, and cases with mechanical obstruction in the birth canal, which cannot otherwise be remedied, should be sectioned, for these as well as fibroids in the uterine wall, all predispose to a rupture of the womb and thru this to death.

I have seen two cases of fibroids which were not operated, and the mothers died before surgical measures could be instituted to save them. Two other cases I have seen operated and they recovered. One of these was diagnosed uterine inertia. She had the inertia, but it was due to small fibroids scattered thru the uterine fundus.

The most hopeless of all cases coming to the obstetrical surgeon are those of abnormal presentation, or disproportion between child and mother which have been infected. Futile attempts at delivery, with or without forceps, and repeated vaginal examinations, cause not only additional trauma to tissues already swollen, edematous and perhaps abraded, but in so doing they enhance the probability of infection, and thru delaying parturition sap the strength and vitality of the mother. By the time she comes to the operating table, her body is aflame with sepsis, and nothing but a Porro operation with its long period of a hard and stormy convalesence will save her, and frequently it fails.

The best chance for these cases, therefore, lies in prophylaxis. The attendant should not permit them to become infected.

In my father's consultation and surgical practice during the summers of the past six years, and in hospital experience as operating assistant to two of Americas' ablest obstetrical surgeons, the writer has had ample opportunity of seeing a large number of complicated pregnancies, and he has been thoroughly convinced that operative interference for the types of cases mentioned above is the one obstetrical procedure par excellence.

Since completing this paper, my father has successfully performed another Porro operation, for fibroids of the uterus with polyhydramuios, which ruptured while the mother was almost at full time.

Fortunately the patient's physician, Dr. J. E. Edwards, had her in the hospital at the time, and notwithstanding the violent hemmorrhage which followed the rupture, she was saved by prompt operative interference.

Rooms 509-10, Chapman Building, Spartanburg, S. C.

A POSTGRADUATE COURSE IN ANATOMY AT HOME.

W. F. R. Phillips, M. D., Professor of Anatomy. Medical College of S. C.

CORRECT diagnosis is the antecedent of correct therapy. While correct treatment is the end striven for, it can be scientifically attained only by correct diagnosis; therefore, that which is imperative to correct diagnosis is equally as imperative to correct therapy. All this is but truism, so obvious and well known as to be trite to threadbareness. Even an apology may be needed for reiterating it. If so, that apology is found in the facts that are continually being repeated wherever it is the practice, when feasible, to check the diagnosis by the autopsy. In the large charity hospitals and the hospitals connected with teaching institutions, it has long been noticed that the postmortem revealed, all too frequently, a pathological condition unsuspected or a state altogether different from that of which the patient was supposed to have suffered. And this, let it be borne in mind, has been, and is, the experience where the diagnostician is working with all the facilities and approved appliances and aids devised to secure precision and accuracy of diagnosis. Under such favoring circumstances and conditions, statistics published, from time to time, by different investigators have shown varying but large ratios of incorrect to correct diagnosis, according to the diseases investigated.

It is not my intention to substantiate this assertion with an array of statistical facts; I take it for granted that you do not care to have your time consumed listening to numerical citations of such sort. However, it is relevant to the main purpose of this paper that a generalization of the relative accuracy of diagnosis should be made. From the various reports that have been alluded to, and using the statistics given in them as a basis for deducing the probable general average, I think, we may safely affirm that the ratio of accuracy to inaccuracy of diagnosis is not more favorable than three to one, or, putting it more impressively, out of every four cases diagnosed, three will be correct and one incorrect. Why is it that we must confess to the existence of such a state of affairs? Probably every one has his own opinion as to the causes of the all too large number of mistaken diagnoses, and, doubtless, there is merit in them all. Indeed, it would be most unusual if we were of unanimous opinion. To me, the factors most operative are our seeming failure to think in terms of physics and chemistry, that is, to think anatomically and physiologically. We think too much of the **disease having** the man and too little of the **man** having the disease. Symptoms and treatments and pathological end results loom large in the per-

spective of our horizon and preoccupy our thoughts to the exclusion of the level, but rich, alluvial foreground of form, structure, and composition. We think too little of man as a piece of complicated mechanism, made up of solids, liquids, and gases, subservient to the ordinary physical and chemical laws and principles that govern the rest of the universe.

Apparently, we ignore the fact that the material out of which a machine is made, the form of its parts, and the manner of their unions and connections, fix its functions; fix the kind and quality of the work it can do; fix the injuries that the machine may sustain and work and yet be reparable, and the manner in which it may give evidence of its injuries. Equally so is it of the human body, that the kind of material of which it is composed and the physical manner in which that material is put together, determine the functions of the organism and the evidence it may give of their workings; of the ease and of the dis-ease with which their activities are accomplished. Therefore, if we are to interprete this evidence aright, obviously we must understand the plan and the parts of the machine and the properties of the material used in its construction. It is my purpose to speak only of the plan and the parts of the machine, of what we generally understand by the term, its anatomy.

It has passed into aphorism that anatomy is the foundation of medicine; that on this foundation rests physiology and on it, pharmacology and pathology, and on these, diagnosis and therapeutics. Yet ask the averagely well informed practitioner what he knows of anatomy and what use he makes of his anatomical knowledge, and, if I be not very greatly mistaken, he will reply, that he has forgotten the one and does not use the other. However, in all likelihood, he will qualify his reply by expressing a wish that he could retake a course in anatomy, as he feels that if he but knew it as he did when a student he would find his daily professional work more satisfactory to himself, at least, and probably more beneficial to his patients. Now there is but one way in which anatomy can be learned, and that is the same way in which a machine is learned, by taking the body apart as a machine is taken apart and studying and reflecting on it while so doing, and repeating the process till the knowledge is fixed and determinate. But time and opportunity are both needed, and sometimes the one is to be had and not the other. Let one but apply to a medical school for an opportunity to take a laboratory course of a few weeks in anatomy, and, to the great number of such applicants, the reply will come back that material is not available at the time or that there is not more than the school needs to meet the demands of its regular students; and such is very generally the case, for human anatomical material is necessarily not obedient to the laws of trade and commerce. There is, however, in the practice of every general practitioner an opportunity, or if I may not be misconstrued, a source of supply that can be legitimately made use of, and that is the still-births that occur more or less often in every one's experience. Many of these unfortunate instances would be willingly consigned to the physician on request.

Perhaps, almost certainly, just here some one will reserve the objection that, one can not learn anatomy from the infant body. I am going to anticipate that objection by affirming that no human body of any other age offers any better opportunities for anatomical study. And I am going to demonstrate the truth of this statement. I ask you to look at the specimen that I pass around and then tell me if you ever saw the structures displayed on it more clearly defined on an adult cadaver. I may go even further and ask if you ever saw some of the structures as well defined on the grown-

up as you see them on this infant cadaver. There is of course a decided difference in the size of the structures of the adult cadaver as compared with those of the infant, but this difference in size is of material advantage only where demonstration to others is concerned; to the person doing the work, actually studying the structures themselves, I think, the advantage is in many respects with the infant. We may not inaptly compare the two, the adult and the infant, respectively to a full sized portrait and to a minature; the portrait can be seen by many at the same time, the minature only by one or two at most. Because of its small size, the minature can be brought closer under observation and more critically examined as to the beauty and excellence of its execution. So it is with the infant structures. Another advantage the infant cadaver has for study over the adult is the important one of being more likely to be normal in its organs and other parts. In the adult cadaver, one sees frequently more pathological than normal organs, especially the thoracic and abdominal viscera. The ease with which the structures of the infant cadaver can be displayed is in striking contrast, too, to the difficulty often encountered in the adult. The connective tissue envelopes of the infant, excluding the adipose tissue, are in large measure transparent and often permit the vessels, nerves, and muscles to be seen quite distinctly through them, sufficiently so as to require no further dissecting or but a minimum of time so spent on them —a great saving of time as compared with the labor of cleaning the same structures in the adult body. A few strokes of the scalped or a few pulls with the forceps displays on the infant cadaver what it would take, perhaps, from a quarter to half hour to dissect out cleanly on the adult. There is another advantage that the infant body has, that of presenting in their maximum of development or under the most favorable conditions for observation some organs that in the adult are observed in a more or less vestigial condition, or under less favorable conditions; for examples, the thymus and the abdominal aortic bodies, and the lymphatics and the sympathetic nerve plexuses.

Also there is the utilitarianism of first hand knowledge of the infant anatomy, inasmuch as the infant's ills constitute such a considerable part of the physicians practice. This knowledge is not useful solely for its immediate utility; it possesses potential developmental elements that later in life may appear as etiologic factors in the production of disease and in its diagnosis. Let me illustrate my meaning: for example, let the hernial region in a male infant be examined, and at once one is struck with the slight degree of obliquity that the internal and external openings of the inguinal canal sustain to each other; in many cases, it may be said that the two openings are directly opposite, that the inguinal canal comes straight instead of obliquely through the abdominal wall. How easy, then, is it for the internal pressure of the abdominal viscera to begin that stretching and out-pocketing of the internal opening that later on in life, under continued pressure, developes into a hernia. After examining several infant bodies, perhaps the impression will be that hernia is an infantile and not a congenital defect; that a little more hygienic attention to the hernial region in infancy may prove the ounce of prevention in youth and obviate the pounds of cure expended in adult life. Pass to the heart and observe the foramen ovale, not yet closed; notice though that is not strictly speaking a wide open foramen, but that on its left side, its left atrial aspect, there is a valve-like flap, in many cases a perfect valve, which, while offering no obstruction to the passage of blood from the right atrium to the left atrium, does offer a great deal, often a total obstruc-

tion to the passage of the blood from the left atrium to the right atrium. Later in life this valve, for so I think, it is more correctly described, closes, but not in every case. In fact, in many cases it never closes, remaining patent as a valve all through life. On an average, we may say that this valve is patent, as a valve, in one out of every four or five individuals; I have found it patent in seven out of eight consecutive adult cadavers recently examined with respect to its patency. May this not explain some of the presystolic cardiac murmurs that are heard and are the only evidence of cardiac impairment found! There are other interesting things, things that will set the reflectively disposed to thinking, that I might mention in connection with this infant cadaver, but, I trust, enough has been said to convince you that it is worth while to become acquainted with it at first hand.

I do not wish to be understood as claiming that the infant cadaver is to be prefered to the adult for the study of anatomy; neither do I wish to be understood as implying that the adult is preferable to the infant for the same purpose. Both should be studied, and it is to be regretted that the practice has not been to require that the regular course in anatomy of our medical schools should include a laboratory knowledge of both. I do, however, wish to emphasize the fact that anatomy can be learned as well from the infant as from the adult. Under the usual plan of studying only the adult body, it is necessary to take cognizance of the departures of the developing body from the adult type and to apply corrections, as it were, when dealing clinically with the infant type. It is just as easy to reverse the process and to apply the corrections to the adult type using, the infant type as the standard.

I began with the thesis that correct therapy was dependent on correct diagnosis, and it, in turn, on a thorough knowledge of the mechanism of the organism; and that the only means by which this thorough knowledge could be had was by taking the organism apart often enough to become familiar with it. Owing to its size, the legal and other difficulties incident to obtaining and using it, except in specially arranged institutions, the adult cadaver is not available for study outside of the medical schools and hospitals, and these are not accessible readily to the large number of physicians. On the other hand, the infant cadaver, such as I have indicated, the stillbirth, is available, and because of its small size and the ease with which it can be preserved and stored, it constitutes an excellent subject for study, for gaining that thorough mastery of the body that is so imperative to correct diagnosis and for correct treatment. I would not be understood as implying that anatomy can be as satisfactorily studied at home, in the manner I am suggesting, as it can be in institutions regularly equipped for the purpose. But I do wish to be understood as affirming that one can relearn enough in the manner to be indicated to be of great value to him, and a stimulus to the habit of thinking anatomically whenever he has a diagnosis to make.

A few moments more, and that on the subject of preparing and keeping the cadaver. The process is simple. What I have used for some years with satisfaction as a preserving solution is made as follows:

Formaldehyde, 40% solution	100.
Borax	50
Salt	50
Water to make	1,000.

This solution is injected into an artery, usually, the left common carotid, until the body is well distended, the eyelids, lips, and nose appearing swollen, and often the fluid is observed oozing out the nose and mouth. As long as the fluid goes in easily, it should be injected. It is preferable to make the injection towards the heart, and it is of course neces-

sary to tie the cephalic end of the artery to avoid loss of fluid that would otherwise result. After the necessary quantity of fluid, which on an average, will be from four to eight ounces, according to the size of the subject, has been injected, a colored hard injection may be used, if desired, to make the arteries show more distinctly. A five percent solution of ordinary glue, colored with vermillion, makes a very satisfactory mass. On being injected, it is acted on by the formaldehyde in the preserving solution and is "set" as an insoluble jelly. This glue mass should be injected as hot as practicable. After injecting, the distal end of the artery must be tied till the glue sets or else a great deal of it will run out. An ordinary aspirating syringe makes a good injecting syringe for both fluids. The needle should be as large as will easily enter the artery, although a smaller size will answer, but the larger the easier the injection. While injecting through an artery is preferable, it is not absolutely necessary. The cadaver may be preserved by injecting directly into the tissues and cavities of the body, as in ordinary hypodermatic and aspirating practices. Again, if the dissection be begun while the body is still fresh, no injection need be made if a considerable extent of the skin be removed and the body be placed in a large quantity of the preserving solution. In such instances the abdominal cavity should be opened sufficiently to let the fluid enter and, also, an opening should be made in the vertex of the skull to admit fluid to the brain. While injecting the preserving fluid it is well to open the jugular vein to let the grumous blood escape. The vein should be closed as soon as the flow becomes fairly watery. This avoids discoloration of the tissues during dissection.

It is not essential to use a hard mass for the arteries, as these vessels show up quite well uninjected—but a colored injection adds to the ease with which arteries can be distinguished from nerves. Having injected the body, it may be preserved indefinitely in a solution of the same strength as that used to inject it, but I prefer a weaker solution, such as:

Foraldehyde, 40% solution	10.
Borax	5.
Salt	5.
Water to make	1,000.

As this strength is adequate, and the amount of formaldehyde is not too large to be disagreeable to work with. While actually working on the subject if it be washed first with water and then water used freely to keep it moist, all disagreeable effects of formaldehyde will be avoided. There is absolutely no odor to the subject and it can be kept any where as far as smell is concerned.

An ordinary stoneware jar makes a good receptacle for keeping purposes. A small board or a block makes a dissecting table, which placed on a waiter or piece of oil-cloth makes a dissecting room, to all intents and purposes. Some strings and pins together with several pairs of small forceps and a scalpel or two, complete the ordinary equipment. A pair of bone forceps will be found useful, and, in place of these, a stout pair of scissors. So equipped, the busy physician can begin his postgraduate course of anatomy at home and at his own leisure and convenience. From want of practice at first he may not get out all of the structures he goes after, but as he gets back some of the deftness he once had, he will find that he is not only getting out all that he did when a student but that he is seeing it better and in a very different light from former days. And as he looks at the beauty of the mechanism he is uncovering, if he does not receive from it inspiration that will aid him in his daily work, he is indeed one devoid imagination.

SOCIETY REPORTS

SPARTANBURG.

The Spartanburg County Medical Society held its regular monthly meeting on September 28th and in spite of bad weather was well attended.

The society had as guests, Captains Monck and Meude of the Base Hospital at Camp Wadsworth. Captain Meudes who is an authority on tropical diseases addressed the society on malaria, and the members were greatly interested and pleased with the address as they were also with Captain Moncks address on Iaceo Iliac affections.

The Society is looking forward with much pleasure to having with them from time to time members of the base hospital staff and during the winter will hold meetings twice a month. The coming election on October 9th for a special levy for a general hospital for Spartanburg County was discussed and the physicians of the County are very enthusiastic and hopeful of the outcome.

L. Rosa H. Gantt,
Secretary.

LAURENS.

The Laurens County Medical Association held its regular September meeting in Laurens with a large attendance present. Our Society is doing splendid work this year and more than usual interest in the Society meetings is manifested.

At the September meeting Dr. R. E. Hughes read a most excellent paper on "Blood Pressure." His paper was generally discussed by all present. Dr. J. H. Teague delivered a very interesting address on "Operations on the Gall Bladder." The doctors talk showed study and thought and he was given close attention.

The October meeting will be held in Laurens the Fourth Monday afternoon. Dr. W. T. Pace of Gray Court will discuss "Pellagrous-Insanity" and Dr. A. J. Christopher will discuss "Diagnosis and Treatment of Gastric Ulcers."

At the November meeting Dr. B. B. Steedly of Spartanburg will be the guest of the Society and deliver an address.

J. M. Bearden, Secretary.

BOOK REVIEW

TEXT BOOK OF OPHTHALMOLOGY—By Hofrat Ernest Fuchs. Professor of Ophthalmology in the University of Vienna.

Authorized translation from the Twelfth German Edition: Completely revised and reset, with numerous additions specially supplied by the Author and otherwise much enlarged.

By Alexander Duane, M. D., Surgeon Emeritus, Knapp Memorial Hospital, New York. With four hundred and sixty-two illustrations.

FIFTH EDITION—Philadelphia and London—J. B. Lippincott Company.

The Author of this text book is one of the most renowned professors of Ophthalmology in the world. The translator states that the present edition is in several senses a new work. No new German edition has been issued and none is at present contemplated. When the author learned that another American edition was projected he not only gave his permission for the insertion of such additions as in the translator's judgment might seem desirable, but also with characteristic kindness himself supplied notes of many additions and changes. These, therefore, as well as the many alterations made by the translator are not contained in any German edition. The book is exhaustive and presents the whole subject in the most admirable way.

THE SURGICAL CLINICS OF CHICAGO. August, 1917, Volume One Hundred Four, with 71 Illustrations. Published Bi-Monthly. W. B. Saunders Company, Philadelphia and London.

Among the excellent articles in this number are the following:

Clinic of Dr. Albert J. Ochsner, Augustana Hospital.

Craniotomy for Jacksonian Epilesy.

Tumor in Undescended Testicle.

Clinic of Dr. Arthur Dean Bevan, Presbyterian Hospital.

The Technic of Colostomy.

Prolapse of Rectum: Technic of Rehn-De Lome Operation Under Local Anesthesia.

Clinic of Dr. Daniel N. Eisendrath, Cook County Hospital.

The Diagnosis and Treatment of Common Duct Calculi—With Special Reference to Overlooked Common Duct Calculi.

Clinic of Dr. Arthur H. Curtis, St. Luke's Hospital.

Remarks on Leukorrhea.

Clinic of Dr. Gustav Kolischer and Dr. J. S. Eistaedt, Michael Reese Hospital.

A New Method of Anesthesia in Prostatectomy.

Clinic of Dr. Charles A. Parker, Home for Destitute Crippled Children.

Acute Suppurative Destruction of the Upper Fermoral Epiphysis—So-called Ephiphysitis.

THE ROENTGEN DIAGNOSIS OF DISSEASES OF THE ALIMENTARY CANAL —By Russell D. Carman, M. D., Head of Section on Roentgenology, Division of Medicine, Mayo Clinic and Albert Miller, M. D., First Assistant in Roentgenology at the Mayo Clinic. Octavo of 558 pages with 504 original illustrations. Philadelphia and London: W. B. Saunders Company, 1917. Cloth $6.00 net; Half Morocco $7.50 net.

Any contributions from the heads of departments at the Mayo Clinic must necessarily be authoritative. The profession, therefore, will welcome a book on X-Ray Diagnosis of the Diseases of the Alimentary Canal. We commend the volume for being representative of the best efforts now being put forth in this most important line of investigation. The surgeon, the general practitioner and specialist should have this book in the reference library.

MUSSER-KELLY — PRACTICAL TREATMENT, VOLUME IV.

PRACTICAL TREATMENT, Volume IV. By 76 eminent specialists. Edited by John H. Musser, Jr., M. D., Associate in Medicine, University of Pennsylvania; and Thomas C. Kelly, M. D., Instructor in University of Pennsylvania. Desk Index to the complete set of four volumes sent with this volume. Octavo 1,000 pages, illustrated. Philadelphia and London. W. B. Saunders Company, 1917. Cloth $7.00 net; Half Morocco, $8.50. net.

Ordinarily systems of treatment are ephemeral and in the long run not worth the money put in them owing to the rapid advance of medical science. The work before us, however, presents the newest treatment and somewhat of a resume of the preceding three volumes bringing them all up-to-date as far as practicable. A large number of distinguished writers have contributed to this volume and the complete set would appear to have overcome many of the objections to systems of medicine.

In a separate volume for desk use is presented a complete index to the entire four volumes. This appears to be very valuable and will be exceedingly handy for the busy practitioner.

THE PRESCRIPTION.

Therapeutically, Pharmaceutically, Grammatically and Historically Considered.—By Otto A. Wall, Ph. G. M. D., Professor of Materia Medica, Pharmacognosy and Botany in the St. Louis College of Pharmacy: Member of the Committee for Revision of the Pharmacopeia of the United States, 1880-1890 and 1890-1900; Second Vice-President of the Convention for the Revision of the United States Pharmacopoeia from 1900-1910; Presiding Officer of the United States Pharmacopoeia Convention of 1910; One of the Authors of the "Companion of the United States Pharmacopeia;" Author of "Handbook of Pharmacognosy;" "Lessons in Latin," etc.

FOURTH AND REVISED EDITION. St. Louis, C. V. Mosby Company, 1917.

Dr. Wall has revised this Fourth Edition very thoroughly and gives a historical review of the prescription in all of its details. The book will not only prove of great interest to the student of medicine, but to all physicians. It is well bound and printed on good paper and has two hundred and seventy-four pages.

DISEASES OF THE SKIN.—By Richard L. Sutton, M. D., Professor of Diseases of the Skin, University of Kansas School of Medicine; Former Chairman of the Dermatological Section of the American Medical Association, Member American Dermatological Association; Assistant Surgeon, United States Navy, Retired; Dermatologist to the Christian Church Hospital. With eight hundred and thirty-three illustrations, and eight colored plates. Second edition, revised and enlarged. St. Louis, C. V. Mosby Company, 1917.

Perhaps no work on skin diseases in this country has presented such excellent illustrations which is of immense practical value to the practitioner. We commented favorably on the first edition and it is our pleasure to repeat our favorable opinion of this, the second edition. There are eight hundred and thirty-three illustrations and eight colored plates. The book contains a thousand and twenty-one pages. We believe there is no better work in American literature.

ABSTRACTS

ABSTRACT OF THE SCIENTIFIC PROCEEDINGS OF THE THIRTY-NINTH ANNUAL CONGRESS OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION.

Held at Atlantic City, N. J., May 28, 29, 30, 1917, (Emil Mayer, M. D., Abstract Editor, New York.) The president, Joseph L. Goodale, after expressing his appreciation of the honor conferred on him, said:

This year we meet at a time when the thoughts of all are centered upon our entrance into the great war. Aside from the fact that lesions of the upper air passages are especially frequent in the present war, both from the character of the missiles and from the use of asphyxiating gases, observers have noted a great increase in inflammations of the nose and throat spread by contagion among the numerous masses of men in modern trenches.

The contributory causes are the prolonged stay in the trenches, the dampness and want of ventilation in the dugouts, together with the defective light, in which the virulence of microorganisms is increased, or at least the bactericidal influence of sunlight and fresh air is absent. These conditions appear to favor not only the spread of acute catarrhal infections, but also of cerebrospinal meningitis. The importance of stamping out foci of this latter disease has suggested the desirability of examining recruits with reference to the possibility of their being carriers through lodgment of the meningococcus on the mucous membranes of their nasopharynx. Disinfection of the mucous membranes of carriers has been successfully accomplished by placing the individual in a chamber containing a certain percentage of chloramine vapor for a few minutes. The procedure is said to cause but slight irritation to the mucous membranes, but seems to have almost a selective action on the microorganisms in question.

Some sections of the line appear to be especially unhygienic, and numerous cases of infection which in ordinary life are rare, such as perichondritis of the larynx and primary laryngeal tuberculosis. Latent systemic disease is prone to be lighted up—such as tuberculosis and syphilis. Bleeding from the nose, trachea and bronchi, at times of an alarming extent, often occur. In albuminuria, fatigue and cold are apt to bring on glomerulonephritis, a not infrequent symptom of which is edema of the glottis. The unfavorable influences are increased by the difficulty of changing clothing, transportation in open vehicles, and by rapid changes of temperature.

Direct laryngoscopy has proved its value in locating traumatic lesions.

Secondly, may we not then profit by an examination of the writings of those who are now endeavoring to indicate some of the errors of judgment and conduct in matters of education and research?

In illustration of past deficiencies in this respect may be cited the fact that for many months the English authorities, while rigorously excluding from Germany such articles as saltpeter and cotton, nevertheless were permitting the exportation of lard from this country in large quantities, in ignorance that it is the source of glycerin, and consequently a prime requisite in the manufacture of explosives.

We must, therefore, recognize that as nations court destruction for want of science, so our profession in America

runs the risk of being outstripped by that of other countries unless it rests upon an equally secure foundation of scientific training with all that this implies.

Another matter which I wish to present for your consideration is the slackening up of scientific work in allied countries in the early part of the war.

We should differentiate between those educators and investigators, on the one hand, whose position permits an advantageous deflection of their activities into channels capable of rendering a direct national service, and on the other those individuals who, by reason of their age, lack of physical qualifications, or from the nature of their work, may regretfully feel that they must stand aside without a definite service to offer.

Such men are capable of making a very real contribution to the nation. It is for them to uphold the best traditions of their past to maintain without faltering their customary work of teaching and investigating, and to present to their comrades whose good fortune it may have been to participate more directly in military service, on the return of peace, a definite record of having kept undimmed each in his own chosen field the light of education and of research.

Further Observations Upon the Use of Radium in Diseases of the Upper Air Passages.

(By D. Bryson Delavan, M. D., New York.)

From a report by Dr. Ewing and Dr. Janeway of the Memorial Hospital in New York City, an institution devoted to the study of cancer, the writer presents a summary of one hundred and eighty-four cases of cancer of the upper air passages out of a total of four hundred and twenty-two cases.

The successful cases given in the report of cancer of the mucous membranes are illustrative of the best service that radium in the light of our present knowledge can perform. In the majority of them the lesion was small and probably operable, but for some reason operation was deemed indavisable or was refused. While all show complete clinical retrogression, this—from the point of view of those who only consider as cured those patients who are well after three to five years—may not be an absolute cure. The proof must be left to time.

In advanced cancer, any temporary benefit from radium is usually overshadowed by the later progressive extension of the disease. No patient of this class should be given treatment which will be followed by more than transitory discomfort.

To summarize a few after-points made in the report which seem to carry special weight:

Knowledge of the use of radium is making steady progress.

The work of but one year in a single institution shows a marked advance.

As with surgery as applied to carcinoma, so with radium, for the best results are gained by the prompt treatment of early cases.

The question at once arises as to how long it will be before the use of radium will be proved worthy to supplant surgery.

Discussion.

Dr. Charles W. Richardson, Washington, D. C.: I have had very unfortunate results after the use of radium in five case which I recall to mind—four of cancer of the tonsil, and one of cancer of the cheek. They have all died. The cancer of the cheek was discovered very early.

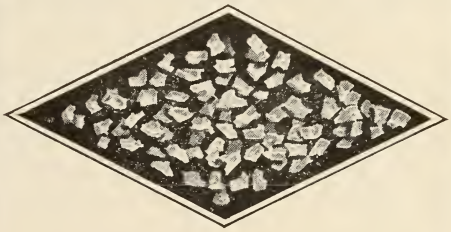
Now, these and the other two cases, which were later, all died in the usual courses of time.

There is, however, one thing to be said in favor of radium in the treatment of these cases, and that is the wonderful relief it gives of all the disagreeable symptoms. As they went along their

course these cases did not look like extensive malignant disease of the tonsils, as we usually see them. There was very little odor and the lives of the patients were fairly comfortable and free from pain. One died from hemorrhage, and the other three from toxemia, and this toxemia came on one week and the next week they passed away. It was all very quick, and they were apparently in good health except for the local condition. Until the time of toxemia they were interesting in that way, that they were all very much more comfortable, but they all four were fatal, and fatal in about the time they would have been without any treatment at all.

Dr. Robert Clyde Lynch, New Orleans: I have four cases in my experience now, one of which I believeve is definitely well. It is a case that has apparently been cured—at least the patient has had no recurrence for eighteen months. He received no benefit at all from the action of the radium until the radium was put in the laryngeal cavity through a tracheotomy tube. Seventy-five milligrams of radium and screened over with a milligram of pure gum rubber was left in situ for eight hours, tied into the larynx by means of a catheter, and put in through a tracheotomy tube passed through the mouth, the radium slung between two strings, the lower string tied to the tracheotomy tube and the upper string to the teeth. In that way the radium was brought into actual contact with the diseased tissue. This was one of the cases that had a recurrence after dissection by suspension, and that recurrence has entirely subsided and the voice returned, and he is apparently well—that is, he has been well for eighteen months at least.

In another case operated upon with a third recurrence it was thought to be perfectly inoperable, and the application of radium to this area caused perfect and complete subsidence of every evidence



Flake Bran

Hidden in a Famous Breakfast Dainty

Pettijohn's is soft wheat, flaked like Quaker Oats. For many years it has been a favorite morning dish.

Now it is made with 25 per cent bran. And the bran is in flake form, to make it doubly efficient.

The result is a bran dish welcomed by all, and of which people never tire. You will find, we think, no other bran food which so meets requirements.

Pettijohn's

Rolled Wheat—25% Bran

A breakfast dainty whose flavory flakes hide 25 per cent unground bran.

Pettijohn's Flour—75 per cent fine patent flour with 25 per cent bran flakes. Use like Graham flour in any recipe.

Both sold in packages only.

(1650)

of the recurrence. It is now six months since this application, and apparently there is not the slightest indication of any recurrence of this metastasis to the second side. In this instance again we were able to supply the radium actually to the site involved, and I wonder whether inability to secure any results in the laryngeal areas is not due to the fact that the cartilage must act on interceptor of the rays, or influence the action of the radium within the laryngeal box.

Dr. E. Fletcher Ingals, Chicago: A patient came to me from a distant state with a growth in the pharynx running perpendicularly. It was about one and a half centimeters in its various diameters and about three or four centimeters long; that is, it extended from the upper pharynx down to the arytenoid cartilages. I could not tell how much farther. The patient came with a history of not having been able to swallow for some time, and was much emaciated and in an extreme condition. The effect of radium in this case was something marvelous; the growth simply melted away. At the end of about eight days the tumor had all disappeared, but there was a large ulcerated surface that represented the base of the growth; and the most remarkable thing was that the ulcerated surface completely healed so that within a short time one could not even see the scar. When this growth had disappeared I found that the patient still could not swallow, and then I was able to determine that she had cancer of the esophagus lower down. I passed a catheter down to the obstructed point, measuring the distance, and then placed the radium in the catheter and measuring the distance passed it down into the stricture. The result of the first application was to open up the stricture very decidedly, and a later application opened it up so that the patient could swallow very well. However, in one of the earlier applications the throat was burned so that it had the appearance as though it had been burned with boiling water or a hot iron. It became very sore and there was considerable sloughing. The patient had a great deal of discomfort for ten or twelve days; however, the burn finally healed.

Dr. J. Payson Clark, Boston: I want to add my testimony to what Dr. Richardson said in regard to the value of radium treatment in relieving the symptoms, especially the symptoms of pain. I was very much impressed with the relief which was obtained in swallowing by patients who had before suffered a great deal.

Dr. Lewis A. Coffin, New York City: I have had a little experience in the last year with radium. I had become thoroughly discouraged in its use and the effects from it. However, we are glad to get anything that adds a ray of hope to forlorn cases.

In one of my cases all the symptoms were very much relieved. The woman could not swallow at all when she came to me, and shortly afterward she was eating fairly and greatly relieved. But the glands softened up somewhat, and we thought it well to open those glands and let out the broken down tissue and put the radium in those glands and left it there all night. The woman, however, began to lose ground and she soon died.

Another patient had a growth in the epiglottis, and a pathologic examination showed it to be malignant. In that particular case it was just like adding manure to soil: the growth was very much stimulated and it grew more rapidly than if we had not used radium.

Dr. Burt R. Shurly, Detroit: I am enthusiastic enough in the use of radium to feel that it is our duty at least to use this method of treatment in all cases of malignancy where we so thoroughly understand that surgical methods are not sufficient to accomplish results.

I operated on one case which involved

the soft palate, the upper jaw and the antrum from time to time—three operations in all—and after each operation there has been a very slow recurrence. During the past three years we have used radium at intervals of from three to six months, and the radium has been passed up into the antrum after the antrum operation and held there by the use of soft pliable copper wire which will bend in any direction.

Another case that I have had which has now been going on for about three years. By a series of applications of radium his case has undoubtedly been prolonged and been benefited, and what looked to be a very speedy fatal issue has turned out to be a slow process that has now continued for three years.

I do believe that radium has a very decided field of usefulness, but there is a great deal in the scientific application of it, and in the dosage and method by which it is applied, and I feel that it is a field within itself, and we should have an expert who will help us in that branch of the work and upon whom we can call at any time.

Dr. Emil Mayer, New York City: I would like to have the reader of the paper in closing give us some statement as to what class of cases have done best. It is very posible that we may innocently do some harm to the patient in our attempts at making a diagnosis. Ought we not, therefore, learn of the experience of those who have followed these cases and found that perhaps it may be that those cases have done best where the diagnosis has been made clinically, and no previous attempt made to remove a part of the growth for microscopic examination to prove the diagnosis? Is it not possible that that stimulates the recurrence of the disease? If we can have that made clear, it does seem that we may be able here to formulate some positive distinct rule as to the method we may adopt with safety.

Dr. Harmon Smith, New York City: I believe the good results that are obtained from the application of radium lies in the fact that practically all tumor growths vary in their virulency, and that those cases which are benefited by radium are less virulent than those cases which go on in their natural process of malignancy to a fatal termination.

In am associated with the same institution as Dr. Delavan, and I have sent a number of inoperable cases there—patients upon whom I had previously done a tracheotomy. This is an institution where every facility is available for properly applying radium in advanced cases, and each case went progressively on to death. In addition to these cases, I have sent two cases of retrolaryngeal fibroma, and one went on to death. In the other case there was such burning and excoriation of the mouth that we had to feed the man by rectum for a week, and instead of retarding the growth, it became accelerated and involved the cheek. This was an angiofibroma.

(To be continued)

BOYDEN NIMS
Chemist
MICROSCOPIST,
BACTERIOLOGIST
910-911 Union Bank Building
COLUMBIA, S. C.

My laboratory work has been relied on by over forty Columbia physicians for aid in the treatment of sickness in their own homes. What better indorsement could they furnish?

Digestive Disturbances

in infants can usually be traced to faulty or improper food. These disagreeable conditions are successfully overcome by prescribing

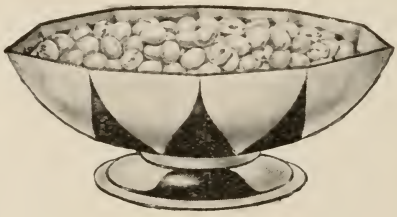
Gail Borden EAGLE BRAND CONDENSED MILK
THE ORIGINAL

which is made from the highest quality of raw materials by the most modern and sanitary methods of manufacture—guaranteeing a finished product—that at all times is clean, wholesome and dependable for Infant Feeding.



Samples, Analysis, Literature, etc.. mailed upon receipt of professional card.

Borden's Condensed Milk Co.
"Leaders of Quality"
Established 1857
NEW YORK.



Bubbles
of Grain, with Every Food Cell Blasted

Puffed Wheat and Puffed Rice are whole grains steam exploded. The moisture in each food cell has been changed to steam, then exploded. Over 100 million separate explosions occur in every kernel.

The grains retain their shape, though puffed to eight times normal size. This is because they are sealed in guns, and shot at the time of explosion.

The result is easy, complete digestion. Every atom feeds. And these airy titbits, thin and flaky, are also food confections.

This process was invented by Prof. A. P. Anderson, formerly of Columbia University. And no other method of cooking so fits these grains for food.

The Quaker Oats Company
Chicago (1652)

Puffed Wheat **Puffed Rice**
and Corn Puffs
Each 15c Except in Far West

The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, $2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.
J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.
WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital, Boston, Mass.

OBSTETRICS AND GYNECOLOGY.
ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY
M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.
G. T. TYLER, M. D., Greenville, S. C.
R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.
J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.
E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

COMMITTEE APPOINTMENTS BY PRESIDENT F. H. McLEOD FOR YEAR 1917-18.

It will be noted that several Committees have been made elective by the House of Delegates at the last meeting of the State Association. One of the most important is the Scientific Committee. The idea is that this Committee shall become a vigorous factor in creating the Program each year instead of leaving the matter largely in the hands of the President and Secretary.

JOHN LAWRENCE DAWSON, M. D.

Dr. John Lawrence Dawson was born in Charleston, South Carolina, September 29th, 1859 and died in Charleston February 20th, 1917. He was the son of the well-known physician, Dr. John L. Dawson and Catharine Osborne Dawson, and was related to many families prominent in South Carolina history.

Dr. Dawson graduated from the College of Charleston in 1880 and from the Medical College of the State of South Carolina in 1881. He held many positions of honor and trust. He was Demonstrator of Anatomy and for many years was Professor of the Principles and Practice of Medicine in this College. In 1903 he was obliged to resign this chair on account of illhealth but upon the reorganization of the College he resumed his former position and in 1915, when his failing health again caused him to withdraw, he was made Professor Emeritus of the Practice of Medicine.

It is impossible to enumerate Dr. Dawson's services to the various medical associations and organizations with which he was connected. He served as President of the Medical Society of the State of South Carolina, Secretary and Treasurer of the Roper Hospital Fund, was President of the South Carolina State

Medical Association, a member of the American Medical Association, and a delegate for several terms to this Association from this State, a member of the Southern Medical Association, and the National Association for the Study and Prevention of Tuberculosis, and was one of the twenty delegates sent from this country in 1913 to the International Congress of Medicine held in London.

Dr. Dawson's wide acquaintance among the medical profession, his keen observation, wonderful memory and exceptional ability to express his thoughts made him a valuable member of whatever association or organization honored with his membership.

As a lecturer he was unexcelled and there are many men throughout the State today who loved him and who owe to him a great deal of their medical knowledge for he was gifted with the power to impart his knowledge to others. The medical students of this college appreciated this fact so thoroughly that a few years before his death they paid him the most unusual tribute of establishment a medical society of their own and named it the "John L. Dawson Clinical Society."

Dr. Dawson was a student, a true friend and a beloved physician and made an enviable record. There have been few men in the medical profession in this State or county whose deaths have left so much sorrow in the hearts of the people they have served. He was true to every trust and a more loyal man could not be found. He had a deep sympathy for suffering which endeared him to patients and friends alike. A man of clear vision, wide experience and having a vast knowledge of the science of medicine, he combined with these attributes a breadth of view and charm of personality which will live in the memories of all those who were so fortunate as to meet and know him. In his death his city lost a valuable citizen, his State a beloved son and his country a true American.

RESOLUTIONS.

WHEREAS, it has pleased Almighty God in His divine providence to remove from our midst our dear friend and fellow member of this Faculty, JOHN LAWRENCE DAWSON, and

WHEREAS, we feel that his death has deprived not only the Faculty of the Medical College of the State of South Carolina of a valued member, but also the State and country at large of a useful and valuable citizen:

Therefore, be it RESOLVED:

1. That the Faculty of the Medical College of the State of South Carolina has by the death of JOHN LAWRENCE DAWSON, M. D., lost a most distinguished and beloved associate, the medical profession a brilliant light and a powerful force for good, and the State a most valuable citizen.

2. That our sympathy is extended to the bereaved family.

3. That a blank page of our minute book be inscribed to his memory.

(Signed) R. S. Cathcart,
Chas. W. Kollock,
Edw. Rutledge.
Committee.

November 7, 1917.

ORIGINAL ARTICLES

THE VALUE OF THOROUGH XRAY EXAMINATION IN ALL INJURIES. THE XRAY IN MILITARY SURGERY.

By W. Frank Ashmore, M. D., Anderson, S. C.

FOOLISH indeed is he to criticize who cannot offer a substitute or remedy for an evil.

Recently a statement was published to the effect that the percentage of correct clinical diagnoses in a large public hospital was only fifty per cent., as borne out by post mortem findings. (Horst Oertel J. A. M. A. Vol. 60, No. 23, June 7th, 1913. Cabot and others). Have you ever obtained an autopsy on a case that you had studied for weeks, months or years, and find yourself wrong in diagnosis? No doubt some have. A favorite remark of a teacher and master in physical diagnoses was, "It all goes to show that physical signs are not worth anything under certain conditions." So true was this, that a correct clinical diagnoses was a thing which brought out comment.

How would you make a diagnosis—positive of lobar pneumonia in a person who had a complete transposition of all his viscera. I do not intend to convey to you the idea that it can't be done by the ordinary methods, but I wish to say that the chances are it would not be done. Such errors should not occur if a competent Roentgen examination is made. Take in pulmonary tuberculosis, I have seen this year two cases that had been treated regularly for the period of one year for T. B. and on a thorough Roentgen examination the chest was absolutely normal. How many cases are being treated for supposed "gastric neurosis" and "indigestion" who are really suffering from ulcer of stomach or duodenum? How many cases are being operated upon for supposed "chronic appendicitis" who really have a ptosed water-trap residual stomach? How many cases are being operated upon for gall-stones who have no gall-stones? How many cases are being treated for so-called "atonic constipation" who have sigmoid flexures three times normal in length? How many cases are being treated for so-called "chronic colitis" who have diverticulitis.

How many cases are being treated for so-called "dyspepsia" who have carcinoma of the stomach; or a ureteral calculus. I wish time would permit for the report of a case I had of this type; she is dead now. How many cases are being treated for so-called "intestinal indigestion" who have carcinoma of the colon? This is one of the fields where I wish to offer you a most satisfactory method and means for eliminating the words "so-called and make it positive in a large per cent.

This method and means is the proper use of the Roentgen rays, and I wish to impress upon you the importance of a most skilled operator; he should not only be a good anatomist and physiologist and the other necessary qualifications, but he should by all means know his apparatus: he should be able to ascertain when his apparatus is "delivering the goods" in the proper way, etc. A radiologist should be a good mechanician and have the patience of Job and other long-suffering specimens of humanity.

I will mention briefly the importance of a most thorough technique and study of the Roentgen plate in all injuries, and especially so in injuries received on railroads or in any machinery owned or con-

Read before Fourth District Medical Association, Greenville, S. C., Oct. 15, 1917.

trolled by corporations. It is too often the case that the surgeons and physicians employed by corporations take too much for granted in making their physical examination of an alleged injury. I have seen such examinations prove very disastrous—from a financial standpoint—to the corporation.

I would like to go into the subject of dental radiography, but this its self is a broad subject and I will only say that in all cases of obscure "rheumatism" and many other "isms" you will sometimes find the foci of infection at the root of some of the teeth.

As for the X-ray in military surgery, I am sorry to say I am not in a position to give you personal experience. No doubt some of the physicians present can come to my rescue. I intended reading to you a paper written by W. W. Wilkins, M. D., C. M. of Montreal, Canada, who has seen service in this capacity in France, and wrote a paper for the American Journal of Roentgenology, which is published in the August number of this year. He gives a splendid detailed account of the work now being carried on by the allied armies. He mentions the importance of a perfect system in this work, and to be prepared at all times for any emergency, as it is necessary at times for a quick move of the field hospitals, and where the current is not available from commercial lines, they use the gas engine to generate current. Most all field hospitals use the X-ray Coil and the exposure is necessarily long, but they are getting splendid results. By this means they are enabled to grade the wounded, and those that are able are sent on to base hospitals for further treatment and examination.

My opinion is that all obscure complaints (which I imagine are numerous) that are met with in our training camps should be subjected to a thorough X-ray examination, for no doubt, they are worthy complaints in most cases, that would possibly be overlooked and would prove disastrous to the soldier. To illustrate this I will ask you to observe this plate; you will notice that he has quite an involvement in the first and second Cervical Vertebra, which in all probabilty is tubercular in origin, and why he is able to do military duty at all is more than I can comprehend. He says that if he is **at attention** or suddenly turns his head his tendency is to fall, but does not suffer any great pain. I have had recently one other case of a soldier who has what appears to be a loose semilunar cartalage of left knee. This case is one that should be gone into most thoroughly and a positive diagnosis made. I realize that if a man tries, he can feign an injury, etc., and it is for this reason that a most thorough X-ray examination should be made. In reporting these cases, I do not intend that it be taken as a censure on anyone,—far from it. I realize that in the service of our country we will find the very best physicians and surgeons; they are the pick of God's people, and I hold the highest respect for them, and I feel for them, and I feel sure that in my humble efforts, I have their support.

It will not be many months until we will have men who have been wounded and sent home for treatment, and we should begin now to prepare ourselves for this work, in order that we can give the boys the very best attention possible. I feel that we should now begin an organized effort in preparing ourselves in the different specialties. In this way only can we give the boys good service. We should not wait until the emergency arises to make a start; then, no doubt, in some cases it would be too late.

HYDROTHERAPEUTIC HINTS BOILED DOWN FOR THE GENERAL PRACTITIONER.

By W. W. Blackman, M. D., Superintendent Robertson-Blackman Sanitarium, Atlanta, Ga.

ALL the authorities on Hydrotherapy, from Winternitz to Baruch and Kellog, deny the existence of any virtue in the minerals found in solution in the many celebrated mineral baths. Dr. Simon Baruch says: "Fortunately, we have sufficiently positive experiments to decide this question and to remove any doubt that may exist. Among these observations are those of Stas who subjected himself on three successive days to prolonged baths in arsenate of sodium and not the slightest absorption was noted. The same result was obtained from baths of potassium iodide and other salts which could be readily recognized in the urine if they had been absorbed."

The heat or cold stimuli conveyed by the peripheral cutaneous nerves to the central nervous system, and thence reflected through the motor tracts, is the really effective element in the mineral baths, and all other therapeutic baths. The stimuli thus generated are aided by only such ingredients as stimulate the cutaneous nerves, to-wit: strong saline or CO2 constituents.

It would be of little value to discuss the use of the hydriatic devices provided in a sanitarium equipment, therefore, I shall only attempt to recall and emphasize a few practical hydriatic expedients for general use.

The general practitioner can facilitate his work in numerous and various cases by directing for his patients the use of Sitz baths. Two child's bathtubs or two small galvanized tubs, a thermometer and a foot tub are the only paraphernalia necessary to the successful use of this hip bath. For the swollen prostate, for cystitis, for hemorrhoids, for leucorrhoea, metritis, and ovaritis, the alternating hot and colt Sitz bath is very effective. The alternating temperatures flush the parts with new blood and squeeze out the old and exert a fine vascular tonic effect.

Two Sitz tubs should be used side by side and the changes, from the hot tub to the cold and back, should be made quickly. The following temperatures and durations will illustrate: 108 degrees—4 min., 75 degrees—2 min., 110 degrees—4 min., 75 degrees—5 min. The last prolonged cold tub drives out the movable blood and fastens it out by sustained vasoconstriction, which is a thing highly desirable in old congestions.

A hot Sitz bath of 110 to 114 degrees for 8 minutes, followed by a single dash or dip of cold water to the thighs, is one of the best emmenagogues, especially if preceded by a hot vaginal douche and followed by rest in bed.

Douches, when used at all, should usually be large. We use a three-gallon container with a rapid flow tube and nozzle and give the hot douche at 110 to 115 degrees with the patient lying over a suitable basin and drain. It could be well given in an empty bathtub. Nearly ten minutes is consumed. The patient should frequently perform momentary closure of the vulva around the douche nozzle to gently balloon the vagina.

Every practitioner meets with cases of prolonged and debilitating menstruation where in the uterine arterioles lack tone and the capillary seepage continues for days after the useful functions of menstruation have been completed. After two days of ample menstruation, no conceivable ill effect can come from terminating the flow by the gentle agency of the Sitz bath about to be described: 102 degrees—4 min., 96 degrees—4 min., 92 degrees 10 min. With this bath a hot foot tub at 112 degrees is used which dilates the vessels of the feet and legs and produces a collateral anemia of the pelvic vicera. This procedure is followed by cool sponging or the alcohol rub, and

after one or two applications is attended by apparently normal cessation of the menstrual flow. On the next day, the alternating hot and cold Sitz baths may be begun for permanent tonic effect upon the pelvic vessels.

Gonococci are very susceptible to heat —being killed at about 104 degrees. After a Sitz bath of about 114 degrees for five minutes the temperature in the urethra will be from 104 to 105 degrees, while that in the rectum 103 to 104 degrees. By a prolonged bath these temperatures may be raised still higher. A hot Sitz bath dilates the vessels of the pelvis, thus bringing to the pelvic viscera a greater supply of fresh blood with an increase of leucocytes. So we have the double effect of lowered resistance of the gonococci, and increased offensive power of blood. This procedure is of especial value in dealing with orchitis due to gonorrhea and with infection of the deep glands and other structures not reached by germicidal applications.

The Wet Fomentation is always available and nicely in its use renders this humble agency a very potent one. When the blood vessels of the skin over a deeply seated part are widely dilated and filled with blood as a result of a hot application, a collateral anemia is produced in the vascularly associated areas, i. e., in the deep parts supplied by the same trunks. It is in this way that the portal circulation is relieved by large abdominal Fomentations or a hot trunk pack. The decongestive or derivative effects of the Fomentation continue for some considerable time after the termination of the single application, permitting of increasing degrees of vascular tone in the affected organ. Analgesic and excitant effects also follow the use of the Fomentation. It is indicated to reduce swelling, stimulate absorption of an effusion or exudate, increase local blood supply, and awaken functional activity. These hot, applications must be wrung very dry and used at a temperature sufficiently high to produce slight pain when brought into contact with the skin. Fomentations afford great relief in the pains of inflamed joints, neuralgia, gall stones, renal calculi and other such conditions. In the pain of hyperacid gastritis, heat should be applied to the epigastrium for half an hour after meals. In toothache, earache, and migraine hot applications must not cover the neck, for the congestion will be increased by dilating the common carotid. An ice bag may be simultaneously applied over the carotid. In applying heat to an inflamed eyeball the Fomentation should cover the lids and brow; if the inflamation is of the eyelid, it should cover the lids and cheek.

The use of the Cooling Compress and of the Heating Compress locally is of such value that everyone should add them to his armamentarium. The Cooling Compress is made by cutting four folds of old linen or six of cheese cloth to fit the part, wetting the same, and covering it lightly to allow evaporation and cooling. The cloth is lightly wrung out in water at 60 to 70 degrees, applied snugly, and secured by a one-layer flannel bandage wider than the cloth. Its use is to maintain active fluxion of the deep, related parts. For tonsilitis, it is very useful if applied, not around the neck, but from ear to ear and secured by a flannel bandage, pinned on top of the head. In subacute articular rheumatism, the Compress hastens recovery. In pneumonia a vest is thus made and pinned over the shoulders and around the chest. The large abdominal Cooling Compress is antipyretic and in acute conditions is usually renewed every hour. It is indicated in typhoid fever for its effects upon leucocytosis and vital resistance.

The Heating Compress acts as a poultice. It is a wet compress, covered with impervious material to prevent evaporation and to retain the heat and moisture. I will describe briefly, the Heating Com-

press, as applied to an inflamed, swollen and feverish wrist or other joint. Six layers of cheese cloth, wrung out of cold water, is wrapped around the joint. This is covered snugly with a rubber roller bandage and the whole enveloped in a flannel roller bandage. The Compress is removed after eight or ten hours, the part is bathed in cold water and given light friction, and after one or two hours rest, the compress is renewed. In acute rheumatism it is often unnecessary to renew this compress to the joint after it has been on overnight, for the articulation will be found to be free of swelling and practically free of soreness. The inflamatory symptoms will probably have taken refuge in another articulation, and can then be pursued thither. It is better to keep them on the move while the causes are being dealt with constitutionally or otherwise.

When prolonged Cold Compresses are employed, the blood vessels of the reflexly associated viscera are maintained in a state of contraction. If an ice bag is used it should be large, but not heavy, and a woolen cloth should lie between it and the skin. At half hour intervals it should be removed and the skin well warmed up, otherwise the surface will become benumbed and the object defeated. Prolonged cold is contraindicated in painful inflamations. For cerebral congestion or threatened hemorrhage, use Cold Compresses to the scalp and face and over the carotids, with a hot leg pack to divert the blood. Over the pericardium, the sedative and energizing effect upon the heart is excellent. Nose bleed and uterine hemorrhage are well controlled by the application of the Cold Compress to the nape of the neck and to the inner surface of the thighs, respectively. An ice bag over the epigastrium is effective in nausea and in anorexia.

Applied to the Head, it Lowers Temperature.

The Hot Full Bath at 106 degrees for three minutes, raised to 108 degrees for three minutes and followed by quickly enveloping the patient in a blanket pack with hot bottles to his feet and legs and a cold compress to his head, is the most satisfactory sweating bath for general use.

The Graduated Full Bath is one of the very best methods for reducing fever. The initial temperature is three or four degrees below the temperature of the patient. The water is cooled two or three degrees every five minutes until 86 degrees is reached, by Buchard's plan. The patient should be continuously rubbed whenever chilly sensations develop. When the patients temperature is above 102 the bath is used every three hours. It is less shocking and more comfortable than the Brand bath in typhoid and equally efficacious in controlling the fever.

The Hot Full Bath is the quickest expedient for relief of chill. John Wesley knew that in periodical chills, a short, Cold full bath given before the time of the expected paroxysm would avert it.

The drinking of a glass of very cold water before eating stimulates the flow of hydrochloric acid in cases of hyperpepsia. Hot water drinking decreases the acid secretions of hyperpepsia. In dropsy from any cause, it is found to be of service to stimulate the kidneys by copious water drinking morning and evening and to restrict water at other times of the day.

Elaborate paraphernalia is not absolutely essential to hydrotherapeutic results. But a knowledge of principles is. No department of therapy is more trustworthy. None could be more direct, physiological and free of cost to the organism. None engenders greater respect and gratitude on the part of the patient for his physician.

ECTOPIC PREGNANCY.

By J. C. Harris, M. D., Anderson, S. C.

EXTRA-UTERINE or ectopic pregnancy is the development of the fertilized ovum outside of the uterus. Three forms of extra-uterine pregnancy are commonly recognized—abdominal, tubal, and ovarian. Abdominal pregnancy is rarely, if ever, primary; it usually results from a rupture of the tube in tubal pregnancy when the ovum it not destroyed. Ovarian pregnancy is also very rare. The common form of extra-uterine pregnancy, therefore, is the tubal, or the development of the ovum within the Fallopian tube.

The cause of extra-uterine pregnancy is not fully understood, and there is probably no one universal cause. In some cases it may be due to mechanical obstruction to the passage of the ovum through the tube, caused by bands, kinks, adhesions or malformations; or it may be due to pathological changes in the tubal mucosa. Many physicians believe that the most frequent cause of ectopic gestation is a previous salpingitis of gonorrheal origin; and the clinical facts support this theory. Rabinovitz says that in the milder forms of gonococcus infection—the so-called catarrhal type, "the mucosa is chiefly involved, the inner two-thirds of the mucosal folds or villi are agglutinated, there is a round cell infiltration both in the mucosa and in the tubal wall; the capillaries are distended and their endothelium is swollen. The lumen is filled with the exudate and the entire tube is enlarged. In the course of time the inflammation subsides and the most important pathological change from our viewpoint that can be found is the loss of the cilia from the lining epithelium. Schroder, Tait, Veit, Wyder and Bandler regard the absence of ciliated epithelium as the most potent cause of tubal gestation, assuming that the ovum cannot therefore be propelled onward."

The termination of extra-uterine pregnancy is usually early—within the first three months, and frequently in the first few weeks. It is usually terminated by tubal abortion—the breaking away of the ovum from its original site, or tubal rupture. Either may cause severe hemorrhage, although the hemorrhage with rupture is usually the most severe. Occasionally extra-uterine pregnancy progresses until a viable foetus is removed, and sometimes to term. In the latter case the foetus usually dies after false labor, and either becomes a dangerous focus of infection or is converted into a lithopaedion or adipocere.

As a rule in tubal pregnancy, the condition is not diagnosed until abortion or rupture occur, as the majority of cases terminate in this way before the ordinary signs of pregnancy are marked. Such abortion or rupture may occur with severe hemorrhage in the early weeks of pregnancy without any history of amenorrhea. Where diagnosis can be made before the termination of the pregnancy, the following symptoms are of importance:

(1) History of the case: age of the patient, exposure to pregnancy, menstrual history, antecedent tubal inflammation, previous period of sterility; in the majority of cases, the history shows either absolute sterility, or no pregnancies for a number of years.

(2) Ordinary signs of pregnancy: Cessation of menstruation, enlargement of the breasts, increased vascularity of the genitalia, morning nausea, etc. In many cases these signs are not marked.

(3) Pathological symptoms: Irregular bleeding from uterus, sometimes profuse, sometimes mere stain, after cessation of regular menses; the blood is usually dark and of "slippery consistency;" passing of bits of tissue or presence of decidua in this discharge; pain, sometimes merely indefinite "uneasy"

Read before the South Carolina Medical Association, Spartanburg, S. C., April 19, 1917.

symptoms in pelvis, sometimes more severe and colicky occurring at intervals of hours or days. Fowler says "a slight feeling of faintness is common and characteristic."

(4) Physical examination: Pelvic mass outside the uterus, corresponding in size with probable duration of pregnacy located in the course of the tube, movable, moderately soft and tender indicates extra-uterine pregnancy; the "boggy" pelvic mass described by some writers is not felt till after rupture. The uterus is tender, and frequently enlarged; the cervix is soft and the ospatulous. These uterine changes are not so marked as in normal pregnancy.

Bandler in a recent article recommends a posterior or an anterior colpoceliotomy (preferably anterior) for the diagnosis of ectopic gestation in doubtful cases: He says: "The uterus is examined with a sound, it may be curetted; the amount and character of the scrapings may be noted; examination of the adnexa may be made under the most favorable opportunity by delicate bimanual touch, and then the peritoneum is exposed or the peritoneal cavity is entered, preferably by the anterior route, and in this way the uterus, tubes and ovaries are brought into view. The diagnosis is made, and if ectopic gestation is found the operation may be completed by the vaginal path. If, for any reason, because of technical difficulties, lack of skill on the part of the operator, or because there is active bleeding going on, the operation is completed by the abdominal path. It takes at most three to five minutes to reach and enter the peritoneal cavity per vaginam, and in a large number of instances, if one is doing the operation simply for diagnosis and wishes to complete it abdominally, the procedure takes even less time, for it is not always necessary to enter the peritoneum. In the vast majority of instances, save in a few extremely early cases, as soon as the bladder is separated and the vesico-uterine fold of the peritoneum is exposed one gets the dark blue shimmer, typifying the presence of ectopic gestation."

The symptoms of abortion or rupture are severe lancinating pains, sometimes nausea, increasing pallor, rapid and weak pulse, labored respiration, slight distention of abdomen, with abdominal tenderness and signs of fluid in the abdominal cavity.

When diagnosis is made before rupture, immediate operation and removal of the affected tube is indicated. As a rule, the best route, for this operation is abdominal; in some cases, when the vaginal route is used for diagnosis the operation may be completed by this method, as indicated by Bandler (see above.)

There is still considerable difference of opinion in regard to the proper time for operation in cases of hemorrhage and shock.

There are two opinions on this subject both upheld by prominent gynecologists.

One is in favor of the conservative or expectant attitude toward such a case, until nature, aided by proper remedies, has had opportunity to check the hemorrhage. This is based on the belief that the hemorrhage is self-limited, and that the woman will be in a better condition to endure the operation after recovering from the loss of blood.

The other opinion, upheld by many of the best surgeons, is that the hemorrhage is not usually self-limited, that the danger is only increased by waiting, and that the operation is best performed at once, quickly and with the least shock possible. See articles by Cobb, Ladinski and Marvel. Many take the ground that operation should be immediate unless the patient is in a condition of extreme shock.

Dr. Cragin recommends that "If the patient is seen at the time of the tubal rupture or abortion, operate and check the hemorrhage as soon as careful pre-

paration can be made, unless the patient is in such extreme shock that the operation in itself would probably prove fatal. In this case, watch the patient carefully, noting the condition of the pulse at short intervals, to see if the patient is improving or losing ground. If improving, wait and operate when the patient is in better condition. If losing ground, operate at once and rapidly, seeking to check the hemorrhage with as little manipulation as possible, perhaps having an assistant infuse the patient during the operation and leaving considerable warm salt solution in the abdomen when closing."

Dr. Young of Boston says that "with the patient in reasonably good condition, operation at the earliest possible moment is always best," but he does not approve of immediate operation in all cases regardless of the condition of the patient.

If the operation is to be deferred, Dr. Polak recommends the following procedure:

"The patient is placed in the extreme Trendelenburg posture and her pulse carefully counted and recorded, her blood pressure is taken and recorded, she is then given a hypodermic of morphine, without atropine, of from one-quarter to three-eights of a grain, which may be repeated on the first sign of restlessness. The pulse is taken and recorded every fifteen minutes, and the blood pressure recorded every hour. No saline and no stimulants are given. Under this plan, in the course of a few hours, apparent changes are noted. When reaction has taken place, as is shown by the slowing of the pulse, the rate usually falling to below 120, an increase in its volume, and a rise of blood pressure to 115 mm. or more, we consider it time to operate."

Some physicians recommend small doses of strychnia during the waiting period, warmth to the extremities, and in some cases cold applications to the abdomen. Others, like Dr. Polak, do not approve of stimulation.

In operating on ruptured cases, the abdomen is rapidly opened, "the offending tube sought, a clamp placed on the ovariopelvic ligament and on the tube at the uterine cornu, which usually controls the hemorrhage, and the tube is then removed, leaving as much mesosalpinx as possible. It is important in the removal of the tube not to interfere with the circulation of the ovary on that side by placing the ligature so as to include the vessels which pass through the ovarian ligament to the ovary. After the hemorrhage is controlled, the large clots are removed, the other tube inspected, and if apparently normal left in place, if diseased or injured during the manipulations it is removed. A quart of normal saline solution is then left in the abdomen and the wound closed in layers, supported by retention sutures of silkworm gut." (Polak.)

Many surgeons use intravenous infusion of normal salt solution during the operation after hemorrhage is checked, and after the operation. Polak does not favor this; he uses the normal salt solution in the abdomen as noted, and possibly proctoclysis, but not infusion.

If blood clots are removed and the abdomen is flushed with the saline solution drainage is usually not necessary. In cases of infected hematocele, drainage is indicated, and vaginal drainage is usually preferred.

The question of removing the unaffected tube must be decided in each case with consideration of the condition of the tube, the age of the woman, and the desirability of further child-bearing.

From an observation of about one score of cases, I wish to report two, of sufficient interest as to justify the two or three minutes that it will take to bring them before this body.

(1st) A case of Lithopedion of 18 years standing (with the specimen) Mrs.

T. White American age forty-five. Height 5 feet. Weight, 240 lbs. was under going an operation for a large vential hernia about the size of a foot ball. A liberal incision had been made. An exploration of the lower abdominal organs was made, near the uterus of the left side a round hard substance was found, incrusted in a calcarious shell about the size of a small orange, with a few adhesions of all of the visera in that part of the cavity. It was readily removed which contained a bony mass when broken, a few of the long bones could be recognized and the contents proved to be an ectopic which had not been discovered by the attending Physician.

Careful inquiry of her past history gave all of the cardinal symptoms of an ectopic gestation 18 years previous which had been considered a miscarriage, and has given birth to a normal child since, three years after the supposed miscarriage.

(2nd) Case, Mrs. P. age thirty-five, came to the Hospital March 10, 1917, with the following history; Had given birth to six children at the normal time, the last one, two and half years old and alive. Menstruation had been fairly regular for the past year, of the 28 day type, up to eight weeks before her entry to the Hospital, which had made its appearance, as she thought every ten days. No morning sickness or enlargement of breast. Two weeks previous she had a stabbing pain in right side with a fainting attack which did not last but a short while. Next day up, attending to house hold duties but her menses appeared and kept up with a considerable variation, temperature 100 to 101 degrees. Tympany. Much pain over entire abdomen. Boggy mass in Douglass pouch. Diagnosis Ectopic Pregnancy. Operation showed diagnosis to be correct, but the great surprise was, she, also had a Uterine impregnation which has been expelled.

BIBLIOGRAPHY.

Tate Lawson—Report of 1st successful case of Ectopic operation Brit Med. Journal Mar. 3, (1883).

Bandler S. W.—Ectopic Gestation American Journal Obstet. (1912).

Bowers L. G.—Extra Uterine Pregnancy. Journal A. M. A. (1910).

Cobb F. —Management of Emergency cases of Extra Uterine Pregnancy. Ann. Surg. 56:836. (1912).

Deaver J. B.—Extra Uterine Pregnancy. Med. Bull. 2:257. (1909).

Murphy J. B.—Surgical Clinics. 3:206 (1914).

McGuire, S.—Evolution of the Treatment of Ectopic Pregnancy. Southern Med. Journal 7:208 (1914).

Marvel, E.—Significance of Delayed Operation in Treatment of Ectopic Pregnancy. New York Med. Jour. 94:1059 (1915).

Montgomery, E. E.—Recognition and Treatment of Ectopic Gestation. Ill. Medical Journal 29:254 (1916).

Polak, J. O.—Two Hundred and Twenty-seven Cases of Ectopic Pregnancy. Amer. Jour. Obset. 71:946 (1915.

DISCUSSION.

DR. GNATT: Mr. President, we have with us one of the teachers of obstetrics, in one of the larger universities, and I move that the privileges of the floor be extended to Dr. Yarros of Chicago; also, to any visiting physician.

Motion carried.

THE PRESIDENT: We will be very glad indeed to hear from Dr. Yarros now.

Dr. Rachelle S. Yarros, Medical Department of the University of Illinois, Chicago, Illinois.

The question of ectopic gestation is always of great interest, not so much now to the surgeon as to the general practitioner, because after all, he has to diagnose it first. So much emphasis is now being put upon the cardinal and even the obscure signs and symptoms in

teaching the younger physicians that there is less and less excuse for failure of diagnoses in most cases. There are, however, cases in which mistakes are made in spite of all of our knowledge, even by some of our best physicians. Again I must say that this happens partly through carelessness and partly because just about so often there is an unusual case with signs or symptoms that apparently contradict everything else. It is of one such case that I wish to speak.

A woman came to my office with her own diagnosis of tubal pregnancy. She stated that a year ago she was operated on for a right tubal pregnancy, and although she had not missed any period, the pain on the left side for the last two weeks and the appearance of dark blood in driblets was sufficient evidence to convince her of the fact. Upon examination I found a small mass in the left tube. I suggested that she be watched carefully for a while. I saw her every week, and at the end of the month the mass had become decidedly larger, the colicky pains continued, and at intervals slight bleeding occurred. I was convinced by this time that it was actually a pregnancy in the left tube and advised an immediate operation. But another physician to whom she was taken did not confirm my diagnosis. I lost sight of the patient for a while. About two months along, according to my calculation, she had quite a severe hemorrhage. She then called in one of our leading obstetricians, who diagnosed the case as one of inevitable abortion. She was packed, which is the treatment he recommends for such cases instead of currettage. The patient again then sent for me, because she was convinced in her own mind that my diagnosis was right. I removed the packing and decided to currettage, if only to clear up the diagnosis. To my amazement I found a good deal more material in the uterus than I had ever seen in a case of extra-uterine pregnancy, and I began to feel that perhaps I had made a mistake in the diagnosis. But for the mass on the other side, which was still larger than when I last saw her, I made the provisional diagnosis of both extra-uterine and intra-uterine pregnancy. The report from the laboratory, however, which stated that there were absolutely no chorionic villi present and that the mass was made up largely of the decidual cells, confirmed my early diagnosis. The patient's family still refused to give their consent to the much needed operation. The surgeon who had operated on her the first time was called in and made the diagnosis of salpingitis resulting from the currettage. He advised rest in bed in the hospital. After two weeks of such treatment, he pronounced her much better and advised her going home. But that very night the tube ruptured, and she nearly died of hemorrhage and shock. This case emphasizes to my mind the value of examining the scrapings from the uterus in obscure cases of extra-uterine pregnancy, and that the absence of chorionic villi furnishes valuable data.

The essayist referred to the fact that gonorrhoea is a most frequent cause of extra-uterine pregnancy. I wish to report briefly of one such case.

The patient came to me before I left for this meeting, with the following history: Married five years; had some kind of infection the first year of her married life; had a curretage nine months ago with the hope of becoming pregnant; has been regular until five weeks ago, when at the date of her menstruation she began to flow and has been flowing for five weeks in small driblets; blood dark, very different, patient says, from the color of the usual menstruation; also complains of slight colicky pain on the right side. On examination, I found a small mass in the line of the tube and no tenderness over the appendix. Her history, which no doubt spoke of a gonorrhoeal infection

in her early married life, the subsequent sterility, the colicky pains, the mass which felt very different and was only confined to a part of the tube, the description of the flow and the color, spoke for a tubal pregnancy. She was operated upon the very next day and an unruptured right tubal pregnancy was removed. As to packing, I personally see no reason for it.

DR. HARRIS CLOSES: Mr. Chairman, this subject furnishes pitfalls for a great number of us. As to the cardinal symptoms if they are all present, there is no danger of making the diagnosis, but so often they are so vague.

AUTO-SERUM IN ARTHRITIS AS USED BY THE AUTHOR.

Dr. William R. Barron, Columbia, S. C.

THE production of Antitoxic Sera was made possible by the discovery, of Roux and Yersin in 1889, that the injury caused by infection with the diphtheria bacillus was chiefly due to a soluble toxin which the bacillus produced in cultures as well as in the animal body.

Antibacterial sera have been placed on an approved basic value by Flexner in his work in giving us Antimeningococcus Serum in 1906.

The antibodies in antitoxic sera are chiefly antitoxin or toxin neutralizers.

The antibodies in antibacterial sera consist of bacteriolysins, agglutinins, precipitins and opsonins, all of which act directly upon bacteria and aid in destroying them and their intracellular products.

In 1903 Wright and Douglas pointed to the fact that there are in blood sera substances they termed opsonins, which so affect bacteria that they are more easily taken up and disposed of by the leukocytes.

Read before the South Carolina Medical Association, Spartanburg, S. C., April 19, 1917.

The technique of one method of preparing and using Auto-Serum, and the one used by my partner and co-worker, Dr. I. Schayer, in the treatment of skin diseases and by me for arthritis is as follows:

Method of obtaining blood is much the same as that pursued in complement fixation tests and blood cultures, except that a much larger quantity is necessary. A Luer needle of not less than 20 caliber is attached by means of an adaptor to a specially devised pipette of at least 50 cc. capacity. The other end of the pipette is drawn down to fit a soft rubber tube about a foot long leading to mouth of operator. A convenient vein in the forearm is selected and prepared, the needle inserted and blood is drawn by gentle suction until pipette is nearly full. The adaptor with needle is removed and blood is allowed to flow into a 50 cc. centrifuge tube. Blood in centrifuge tube is protected by several layers of small squares of steril gauze held over mouth by means of small rubber band. Tube is counterbalanced and placed in centrifuge where it remains until cells are driven to bottom. It is then allowed to stand for about thirty minutes for clot to form. Clot in forming adheres to the walls of the tube and must be released by means of a small glass tube or rod passed round between clot and walls. The tube is replaced in centrifuge and clot forced to bottom with cellular elements leaving a layer of about 20 cc. of clear serum above. A different vein from the one from which blood was drawn is usually selected and the serum re-injected gently from a 20 cc. Luer Syringe. It is needless to say that all ordinary precautions to avoid infection and contamination are observed throughout the operation. We make the pipettes from ordinary 25 mm glass tubing. They are not listed, but could no doubt be obtained from instrument dealers. The end of pipettes to which rubber tube is attached is pro-

tected by cotton plug, wrapped in tissue paper, sterilized by dry heat and kept on hand ready for instant use. Tubes are also wrapped in tissue paper, in addition to being plugged before sterilizing in the same way. The ordinary small laboratory centrifuge is, of course, inadequate for this work. We use one made by the International Instrument Company for this work, and for all other purposes for which a centrifuge is required in general laboratory work.

A point of great importance is to find the foci of infection and remove it, if patients are to be permanently relieved of any arthritis.

The usual interval between the doses of this auto-serum has been five days in the beginning of treatment and increased as relief and symptoms indicated. Some of my cases were relieved of all pain with two doses; the swelling, pain and inflamation in all but one case, so far, were relieved in four to six weeks. This one case failing to get much relief earlier was because of his continued dissipations, but after fourteen doses he was cured.

My eight years experience with gonorrheal arthritis and its slow response to all previous treatment, including vaccine therapy and antigonnococic serum, which heretofore yielded me best results, and my deep sympathy and earnest desire to aid these sufferers, led me to seek some new mode of therapy to help relieve them, hence my use of auto-serum. All the cases of arthritis thus far treated by me with auto-serum have been of Neisserian infection.

I think that good results might attain in any bacterial arthritis with this mode of therapy.

You will want to know, as I do, why does this simple extraction of blood and the re-injection of its serum be of benefit in Neisserian arthritis.

Conclusion Drawn:

It has been proven that the loss of blood stimulates the formation of antibodies.

We are extracting in the patient's blood serum opsonins and antibodies, probably in a more concentrated and easily utilized form.

Bacteria must be opsonically prepared for proper phagocytosis to occur.

My co-worker, Dr. Schayer, suggests that there is probably some change brought about in the protein constituent of the auto-serum; he thinks that while this serum is being drawn and prepared, thus exposed to light and air, an excess of oxygen is taken up.

The rapid and permanent relief afforded these sufferers has prompted me to present this subject to you.

Reference:

Modern Biologic Therapeutics pps. 31, 32, 64.

BOYDEN NIMS
Chemist
MICROSCOPIST,
BACTERIOLOGIST
910-911 UNION BANK BUILDING
COLUMBIA, S. C.

My laboratory work has been relied on by over forty Columbia physicians for aid in the treatment of sickness in their own homes. What better indorsement could they furnish?

SOCIETY REPORTS

ANDERSON.

On October 16th, Fourth District Medical Society met in Greenville with following program:

The addresses of the Army Medical Officers—a large number of whom from Camps Sevier and Wadsworth were present were greatly enjoyed. The first talk on Army Sanitation by Col. Whaley was a forceful, clear cut description of the numerous and varied problems in sanitation and prophylaxis which arise in modern warfare; and the ways and means the Medical department of the army are using to anticipate and meet these problems.

After hearing Col. Whaley it was the opinion of the society that the solving of these problems at Camp Sevier was in competent hands.

The papers by Major Clemenger, Morgan, and Scott described in a very realistic way the functions of the Ambulance Company, the Field Hospital and Base Hospital in action. Maj. Scott who has charge of Base Hospital at Sevier also described some of the many difficulties which the executive of a military hospital has to meet not the least of which was the proper feeding of his patient on thirty-nine cents a day. Those of us who were connected with civilian hospitals decided that we did not have many problems after all.

The paper on Duodenal Ulcer by Maj. Norris was a brief, well presented summary of our knowledge of this subject.

All of the above talks were concise and clear cut and besides being valuable for the information they imparted they were good examples of talks with a snap. (Doctors have been accused of talking around a subject and not on the subject.)

Perhaps the most generally enjoyed speech of the day was that of Dr. E. W. Pressly upon the Doctors opportunity or duty in the present world crisis. (The speech was delivered in the dining room of the Baptist Church where the Greenville County Society was host at an elegant dinner. He made a strong and eloquent plea for a full, red-blooded loyalty on the part of the Medical profession.

Anderson was chosen as place for next meeting and following officers were elected. President, Dr. J. R. Young, Anderson; Vice President, Dr. W. M. Burnett, Greenville; Secretary and Treasurer, Dr. W. B. Lyles, Spartanburg.

J. R. Young, M. D.
Secretary.

MARLBORO.

At a meeting of Marlboro County Medical Society some time ago, the physicians obligated to turn over all fees collected from absent doctors. After more careful study of the question we decided to rescind our action in favor of the agreement at S. C. M. A. meeting. Thus we have seemed tardy about returning the agreement signed.

Thos. H. Smith, M. D.
Pres. Marlboro Co. Med. Society.

BOOK REVIEW

THE SURGICAL CLINICS OF CHICAGO.—Volume I Number V (October, 1917)

The Surgical Clinics of Chicago, Volume I Number V (October, 1917). Octavo of 214 pages, 84 illustrations, Philadelphia and London: W. B. Saunders Company, 1917. Published Bi-Monthly: Price per year: Paper $10.00: Cloth $14.00. W. B. Saunders Company, Philadelphia. London.

Among the excellent articles in this issue are the following:

Clinic of Dr. Arthur Dean Bevan, Presbyterian Hospital, Benign Tumors of the Breast, Chronic Inflammations, and Carcinoma of the Breast.

Clinic of Dr. John Ridlon, Mercy Hospital. Hip Disease.

Clinic of Dr. Albert E. Halstead, St. Luke's Hospital. Hernia of the Breast.

Clinic of Dr. Dallas B. Phemister, Presbyterian Hospital. Brain Cyts Following Skull Fracture.

Clinic of Dr. Daniel N. Eisendrath, Cook County Hospital. The Complications of Appendicitis. Two Cases Illustrating the Clinical Importance of Congenital Anomalies of the Kidney.

Clinic of Dr. Kellogg Speed, Cook County Hospital. Hematuria in Appendicitis.

DISEASES OF WOMEN.—By Harry Sturgeon-Crossen, M. D., F. A. C. S.

Associate in Gynecology, Washington University Medical School, and Associate Gynecologist to the Barnes Hospital, Gynecologist to St. Luke's Hospital, Missouri Baptist Sanitarium and St. Louis Mullanphy Hospital; Fellow of the American Gynecological Society and of the American Association of Obstetricians and Gynecologists.

Fourth Edition, Revised and Enlarged. With eight hundred engravings. St. Louis, C. V. Mosby Company, 1917.

Dr. Crossen is now a recognized authority in his field of work. This is the Fourth Edition. The profession has thus received very kindly the book and deservedly so. We commend it as a splendid work for the general practicioner, up-to-date and not too ultra scientific for practical purposes.

WHITE AND MARTIN'S GENITO-URINARY SURGERY AND VENEREAL DISEASES.—By Edward Martin, A. M., M. D., F. A. C. S. John Rhea Barton Professor of Surgery University of Pennsylvania. Benjamin A. Thomas, A. M., M. D., F. A. C. S. Professor of Genito-Urinary Surgery in the Polyclinic Hospital and College for Graduates in Medicine; Instructor in Surgery University of Pennsylvania. Stirling W. Moorhead, M. D., F. A. C. S. Assistant Surgeon to the Howard Hospital, Philadelphia, Pennsylvania. Illustrated with 422 Engravings and 21 Colored Plates. Tenth Edition. Philadelphia and London. J. B. Lippincott Company. Price $7.00.

This book has passed through nine editions and we have before us the Tenth. The work has been thoroughly revised and is a splendid contribution to the subject. There has been incorporated in the text a practical presentation of vaccines and serium test of renal function and many other additions of great importance. The illustrations are unusually good. The book contains 929 pages and is a credit to the publishers as well as the authors.

THE MEDICAL CLINICS OF NORTH AMERICA.—September, 1917. Published Bi-Monthly by W. B. Saunders Company, Philadelphia and London.

Among the excellant articles in this issue are the following:

Clinic of Dr. Thomas McCrae, Jefferson and Pennsylvania Hospitals, Aortitis.

Clinic of Dr. Hobart Amory Hare, Jefferson Hospital, Cardiac Disease and Digitalis.

Contribution of Dr. Henry K. Pancoast, University of Pennsylvania. The Diagnosis of Pulmonary Tuberculosis by the Roentgen Ray.

Clinic of Dr. Martin E. Rehfuss, Jefferson Hospital. Gastric Infection.

Clinic of Dr. O. H. Perry Pepper, Hospital of the University of Pennsylvania. Essentials and Limitations of an Average Diet.

THE PRACTICAL MEDICINE SERIES.—Comprising Ten Volumes on the Year's Progress in Medicine and Surgery. Under the General Editorial Charge of Charles L. Mix, A. M., M. D., Professor of Physical Diagnosis in the Northwestern University Medical School.

VOLUME VI GENERAL MEDICINE.—Edited by Frank Billings, M. S. M. D. Head of the Medical Department and Dean of the Faculty of Rush Medical College, Chicago. Assisted by Burrell O. Raulston, A. B., M. D., Resident Pathologist, Presbyterian Hospital. Series 1917. Chicago. The Year Book Publishers 608 S. Dearborn Street.

INTERNATIONAL CLINICS A QUARTERLY.—Of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Paediatrics, Obstetrics, Genaecology, Orthopaedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Larynogology, Hygiene, and Other Topics of interest to students and practitioners.

By leading members of the Medical Profession Throughout the World. Edited by H. R. M. Landis, M. D., Philadelphia, U. S. A., with the collaboration of Chas. H. Mayo, M. D., Rochester. Sir Wm. Osler, Bart., M. D., F. R. S., Oxford. Rupert Blue, M. D. D. P. H. Washington. Frank Billings, M. D., Chicago. John G. Clark, M. D., Philadelphia. A. McPherdran, M. D., Toronto. James J. Walsh,

M. D., New York. J. W. Ballantyne, M. D., Edinburgh. John Harold, M. D., London. Richard Kretz, M. D., Vienna. With correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Prussels, and Geneva. Volume IV. Twenty-Sixth Series, 1916. Philadelphia and London. J. B. Lippincott Company.

INTERNATIONAL CLINICS. A QUARTERLY Of Illustrated Clinical Lectures and Eespecially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Paediatrics, Obstetrics, Gynaecology, Orthopaedics, Pathology, Dermathology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to students and Practitioners. By leading members of the Medical Profession throughout the World. Edited by H. R. M. Landis, M. D., Philadelphia, U. S. A., with collaboration of Chas. H. Mayo, M. D., Rochester. Sir Wm. Osler, Brat., M. D., F. R. S. Oxford. Rupert Blue, M. D., D. P. H., Washington, D. C. Franklin Billings, M. D., Chicago. John G. Clark, M. D., Philadelphia. A McPhedran, M. D., Toronto. James J. Walsh, M. D., New York. J. W. Ballantyne, M. D., Edinburgh. Charles Greene Cumston, M. D., Geneva. Arthur F. Beifeld, M. D., Chicago. Richard Kretz, M. D., Vienna. With Correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels, and Genneva. Volume III. Twenty-seventh Series, 1917. Philadelphia and London. J. B. Lippincott Company. Price $2.00.

ABSTRACTS

(Continued from October Issue)

Dr. Norval H. Pierce, Chicago: Based upon his experience the speaker believes that while a growth may show the characteristics of carcinoma under the microscope, it may vary greatly in malignancy.

At the present time there must be an enormous number of these cases, and I cannot see that we have arrived at any particularly well defined opinion regarding the beneficial effects of radium, even at the present time. I can only state that my experience with radium has been in a broad sense disappointing.

Within the past two years I have had three cases of carcinoma of the superior maxilla involving the antrum, and without exception they have gone from bad to worse, although every means of applying radium has been followed, even to perforating the antral wall and putting a capsule of radium immediately into the growth. True, the pain has been diminished and the odor has decreased, but the disease has swept on as though nothing had been done.

I believe that if we depend upon radium for a cure in the early stages of laryngeal carcinoma, we will have about as much effect beneficially or otherwise in the large majority of cases, as we would have if we depended upon faith. We only waste time.

I have had a case recently in which we split the larynx and applied the radium without cutting away the growth, a case of leucoplakia laryngis, where I had observed the patient for four years. This leucoplakia was situated on both vocal cords. The leucoplakia remained unchanged for four years. Suddenly from one of these placques on the right vocal cord, the posterior third, a swelling began—a fusiform swelling covered by mucous membrane—and a well marked cauliflower-like carcinoma developed. The larynx became very much inflamed, and the last I heard of him was that there was a probable recurrence of the growth.

The only possible chance for cases of carcinoma of the larynx is thorough removal by external means at a very early date, no matter how early. Whether we apply radium or not is immaterial; otherwise in extensive carcinoma the only means of safety is a thorough operation, and by that I mean larygectomy.

Dr. James E. Logan, Kansas City: I believe if the suspension method is used and a local application of the galvanic cautery is made directly to the growth,

comprehending or taking in all of the growth so far as is feasible, that we will have accomplished practically all that we could accomplish, if not more, than in an application of radium.

If we are to judge from the literature pertaining to the subject, there appears to be very little if anything in the use of radium for such cases.

Dr. Joseph Beck, Chicago: It is about fourteen years since I started the employment of what I thought was radium in diseases of the upper respiratory tract, and only about five or six years ago did I find out (and then reported with negative results) that practically no radium was contained in the capsule that I was employing. So far as I am able to learn from the literature on the subject, too little radium was employed, and then when an amount, say one hundred and fifty to two hundred milligrams, was left in situ for a period, it burned the structures beyond repair, so that the remedy was worse than the disease. My results are absolutely negative as to cures of deep seated growths; I will not even say of far advanced cases, but of those which I would ordinarily class as operable. When radium was employed in such cases the ultimate result was either laryngectomy in time to save the patient, or a fatality.

If Dr. Mayer would have us treat cases without touching the growth, it does not seem to me it would add anything. We will not know what we are treating. This does not appeal to me. If we do not have microscopic examinations of the growths we are treating, it seems to me the subject would not advance very far.

Dr. D. Bryson Delavan, New York City (closing the discussion): The work which is being done at the Memorial Hospital in New York is very far in advance of anything that I know of that has been done anywhere else, and for that reason I have taken the liberty of presenting this resume of that work.

In this report I mentioned, the hospital gives you the results of its work along this line. It is the best they have been able to do in three years' time with a very considerable number of cases. When more years have passed they will have thousands of cases, but their attitude in treating these patients is purely experimental—time will give more definite results, or at least more conclusive results, whether better or worse.

Of all the cases treated, there are a total of twenty-two which are believed to have fairly retrogressed. That means twelve per cent of the one hundred and eighty-four cases. There are also seventy-nine cases which have improved, which is a total of about forty-three per cent. There are also seventy-nine cases unimproved. This makes a total of fifty-five per cent supposed to be improved, as against forty-three per cent unimproved. In cancer of the escophagus, stomach, etc., the statistics are just about the same.

The method must be adapted to the case, and the ingenuity of the one managing the case must play an important part in the selection of the means of application.

The device of Dr. Robert Abbe is simple, ingenious, and very effective. It is intended for the application of radium to the more remote recesses of the body, and is especially useful in the larynx and pharynx. It can also be introduced in any part of the upper nasal cavity, which is extremely difficult to reach by any other method.

There is another thing which has come to be used in the treatment with radium, and that is an obturator like a plate for artificial teeth, extending backward to the site of the growth and furnished with grooves in which the radium can be placed to the location desired.

As to the hopelessness of cancer of the throat—it is pretty hopeless. The cases all die. We do not get the true statistics of surgery of the larynx. You cannot

get them—no one will give them to you; but if you should get them, you would have a pretty ghastly record. Perhaps it might, therefore, be just as well to exercise a little patience toward radium until we find out what it can do, and look forward with a ray of hope meanwhile to cheer the men who are working very hard to perfect it.

AN ENDOLARYNGEAL REMOVAL OF AN UNUSUALLY LARGE LYMPHOANGIOMA FROM THE LARYNX, WITH COMPLETE RECOVERY OF THE PATIENT.

(By Charles W. Richardson, M. D., Washington, D. C.) As is well known, this type of growth is very unusual and rare in the larynx, lymph angioma being rarer than the typical angioma. This growth presented a gross appearance, of a large bluish, mottled mass in the supracordal portion of the larynx, having its attachment on the right side from the false cord, the aryepiglottidean extending over to and covering the false cord on the opposite side. This was removed by endolaryngeal method, the writer having first tested the fact that it was not a hemmorrhagic growth. On removal by puncture, it had a soft pultaceous feel and exuded a syrupy bloody fluid. It was five centimeters in length, three and a half centimeters in breadth, and two and one-half centimeters in depth. The pathologic investigation demonstrated it to be a true lymph angioma.

The paper deals with the method of operating in these cases, and also calls attention to the fact that this is the forty-second case of angioma, and its modifications, which have been found in the larynx.

Discussion.

Dr. J. M. Ingersoll, Cleveland: I had the privilege of seeing this case before it was operated upon, and was very much interested in the report.

I think that it took considerable courage for Dr. Richardson to determine whether or not the growth was an angioma by incising it. I discussed the case with him then, and we both wondered what the outcome would be, and were suspicious of malignancy. I never had seen anything like it before. The end result is very favorable.

Dr. Emil Mayer, New York City: These cases are especially interesting. One particularly important thing is that the trained eye of the laryngologist sees at once that the diagnosis that is so often made in nearly every one of those cases is wrong, and that the cases are not of a malignant nature. I can picture for myself the view that Dr. Richardson had of that patient, with a proper light, where he at once concluded that the original diagnosis of malignant disease which had been made was wrong. I believe that we can in most instances make a diagnosis macroscopically.

I must congratulate Dr. Richardson on his courage in putting in a knife to see if it was a bleeding tumor, and also on his successful removal of it intralaryngeally. The growth itself differs from most of the others on record, in that it was partially external and partially within the larynx. It is very remarkable that a patient with so large a growth should be able to get along without a great deal of dyspnea. To my mind a case of this kind would be ideal for suspension. With very little effort one could draw the growth into a snare and remove it, and if necessary cauterize the place. In the case I reported a year ago the operation was done externally, and the growth was removed and the mucous membrane sewed over. I am confident that that was the only way the case could have been treated, for the reason that it was below the false cord and not above it.

Dr. Henry L. Swain, New Haven: Some of those present may recall a case in which I removed a tumor in the same manner as Dr. Richardson did, the re-

port of which appeared in the Transactions for 1892. This growth, however, was lower down than it was in the case of Dr. Richardson, and it still holds the record for size in strictly intrinsic growths of the larynx. The growth was in the anterior commissure, and began only slightly above the place where the two cords come together, so that more of the base of the tumor was below than above. When the patient came into my office one could see nothing but the growth upon expiration, but during inspiration this tumor would move down so that the air could get by it. The patient had been ..ing in that way with a very hoarse voice and with difficulty in breathing for nearly two months. He ran for a trolley car and fell down and was nearly asphyxiated, and relating that to me as I looked down into his larynx, I trembled at the idea of getting the tumor out. I had no idea of the up and down dimensions of the tumor; the diameter as I looked down upon it was just what would fill the chink of the glottis, but the vertical dimensions were three times the horizontal dimensions. I told the man that if he was a good soldier I would try to take it out. He consented and I put cocain in, and taking a snare got a good hold of the tumor twice. I tried to get the tumor out but failed. The man was getting blue in the face, but I put on a whole lot of power and got it out. I was more scared when it was finally out than I was before. It was a tremendous growth, much larger than was apparent to the eye, and still holds the record for size. I was prepared for the eventuality of hemorrhage, and told the man to throw himself forward with his head down, hanging over the end of the couch. He minded exactly as he was told, and hardly a drop of blood came away. He came back again on the third day and one could see then where it had been, just above the vocal cord. The patient had no recurrence. Dr. Richardson's specimen is a monster and the result of his skill is most gratifying.

Dr. Charles W. Richardson (closing the discussion): I wish to add just one word to Dr. Ingersoll's remarks, a point which he did not make quite clear. We were a little suspicious of the malignancy of this growth—in fact, we could not quite eliminate the matter from our minds—before we had the result of the pathologic findings.

REPORT OF A CASE OF CARCINOMA OF THE LARYNX TREATED WITH RADIUM.

(By Arthur W. Watson, M. D., Philadelphia): A physician, about seventy-three years of age, came under my care November 24, 1914. There had been increasing hoarseness for a year, without inflammatory symptoms, pain or cough; the general health was good, the general history was negative.

Examination of the larynx showed a smooth, red, sessile growth or swelling on the left side beneath the vocal cord, extending from the anterior commissure backward about one-half the length of the cord, and downward from the cord about one-half inch. It seemed to involve the under surface of the cord. Movement of the anterior half of the cord was restricted, which caused bowing in phonation. The growth was sharply defined and the other parts of the larynx appeared to be healthy. A clinical diagnosis of carcinoma (epithelioma) was made. For obvious reasons a microscopic examination was not made.

When first seen the growth was one that could, undoubtedly, have been removed by laryngofissure, but in consideration of the age of the patient and the fact that he was in favor of trying the effect of X-ray or radium, it was decided not to operate.

The radium was applied to the outside of the larynx; eleven milligrams radium, filtration one millimeter of lead and one

and one-half inches of gauze, for three hours. This was repeated in February (six treatments, 198 milligram hours). March 1st the radium was increased to twenty milligrams, filtration one milligram lead, one-half inch gauze, applied for three hours. This was repeated (six times, 360 Mg. hours). March 17th began forty milligrams radium, filtration same as before, applied for three hours. Repeated (six times, 720 Mg. hours).

Various applications were made, none of them satisfactory, and it had to be adandoned. The external application of the radium again instituted in the following dosage. Forty milligrams radium, filtration one millimeter lead and one-half inch gauze, applied five hours July and August (in all nineteen applications, 4200 Mg. hours).

September 23rd, about one month after discontinuing the radium, it was noted that the growth was apparently gone, left vocal cord a little slower in movement than the right, skin inflamed over larynx.

On the second of April, 1917, the patient returned with hoarseness, which he had noticed for a month or more. Examination showed a small nodule beneath the edge of the left vocal cord near the anterior commissure, the site of the old trouble. Radium was again used, a few days later, forty milligrams, for twelve hours. The larynx was examined two weeks later. The growth was found to be smaller, the neck inflamed. April 25th, only a slight thickening remained. The voice was again almost normal. The same condition was present when last examined.

From the results that I have seen in suitable cases, and with a better knowledge of the dosage, better results may be expected, specially if the radium can be applied from within the larynx, which would be made easier by a tracheotomy.

Discussion.

Dr. Robert C. Myles, New York City: It is a question to be solved, whether in the early stages of incipient cancer it is best to immediately remove the cancerous mass with the adjacent tissues, and if it recurs to use radium, or whether it is best to use radium without microscopic examination. In this connection it would seem best to consider to what extent we would advocate either procedure if the growth was in ourselves. Judging from personal experience and observation, it is my belief that the average person who has a growth, or symptoms of a growth that is probably malignant, defers the question because they do not like to have it decided that they have one, and hope against hope that nothing will be found. There is unnecessary delay caused by that attitude of mind.

As far as the secondary or tertiary conditions of cancer are concerned, it seems to me to be unwise not to use radium for the hope it offers in the relief of pain and odor and the other phenomena connected with malignancy.

I think it was Dr. Mayer who made the remark earlier in the morning that we should first try to cure the patient and leave the scientific diagnosis unsettled. On the other hand, this is not conductive to progress; again, I do not know whether we can improve the physical conditions of a case which experience has shown us is malignant, by microscopic examination, nor do I see what the chances are of it being nonmalignant by resorting to such examination.

Dr. Henry L. Swain, New Haven: I am very glad that we have heard this paper, first because it was a model in the way it presented the dosage, method of treatment, length of treatment, etc., and secondly because it left us with a spirit of hopefulness.

This is again a case of the old, old story. We went through all this with the X-ray. We had in our hands a powerful means the possibilities of which we knew nothing, and we learned by exchanging experiences in the various meet-

ings all over the country that X-ray burns were produced, that we must use a filter, that we had to have adequate dosage, if we were going to get results. We are now doing the selfsame thing with radium. In exchanging these experiences now, it seems as if we ought to come to some conclusions. I think one thing is clear—that we should not putter around with other means, and if we are going to use radium, we should get at it early. Inadequate dosage is worse than nothing. On the other hand, we must not use such a tremendous dosage that we either kill the patient or the surrounding tissues.

Dr. E. Fletcher Ingals, Chicago: I am under the impression that the dosage here is quite as important as in giving strychnine; that is, if you give too large a dose it will do a great deal more harm than if nothing had been given. If we read the reports of the men who have used radium, we will find that there has been in some cases great destruction of tissue from which some patients have finally died. Some patients can tolerate larger doses than others. It appears to me that radium, X-rays and sun's rays act practically in the same way; they burn in every direction where they can reach, unless properly screened. All the weaker tissues burn out first; but if the dose is a little too strong, the normal tissues will burn out at the same time. If this is correct, then the dosage is by far the most important thing; it must be worked out carefully. I tested each individual patient—a small dose at first, and repeated, according to its effects.

Dr. Arthur W. Watson, Philadelphia (closing the discussion): What I wished to bring out was the question of dosage. I am of the opinion that if the dosage is too heavy, so that the normal tissues around the growth are destroyed, cicatrical tissue is produced in which the malignant disease may more readily be reproduced. It seems to me that this may be

Quaker Oats

Extra-Grade Oat Flakes

2260 Calories For 12 Cents

Quaker Oats is today a marvel of economy. Eggs cost nine times as much per unit of nutrition. The average mixed diet costs four or five times as much.

Yet Quaker Oats is the highest grade of oat food. It is flaked from queen oats only—just the rich, plump oats. We get but ten pounds from a bushel.

Because of this selection, Quaker Oats stands supreme in flavor. Because of that flavor, it stands first the world over.



Even at twice this price, a better oat food is impossible.

The Quaker Oats Company

Chicago (1757)

the reason for failure to cure the disease in some cases. But I believe the best way of getting at the proper dose is by regarding what has been done in each case, instead of considering one application of radium the same as another.

Tuberculoma of the Tongue.

By Carl E. Munger, M. D., Waterbury, Connecticut. Male, aged thirty years. The patient's tongue presented a crater-like cavity situated on the dorsom, at the junction of the middle and posterior thirds, in the median line, the prebase of the tongue. At the bottom of the crater was a marked ulceration covered with a yellowish slimy secretion, and from the central ulceration were narrow sharply marked ulcerations radiating to the circumference of the thickened and indurated mass. The surface of the swollen mass was yellowish in color, and there was marked and exquisite tenderness upon the slightest pressure, with much pain at every movement of the tongue. This pain was localized and not radiating when the tongue was at rest. There was present also the condition known as nigrities.

While the tubercular ulcer may be primary or secondary, a primary tubercular lesion of the tongue is extremely rare; although a few cases of tubercular infection of the tongue following traumatism have been reported. Speaking generally, the tongue is more often inoculated from the lungs than the lungs or larynx from the tongue.

The case reported presented a marked deviation from the usually reported situation of tubercular lesions on the tongue, which have almost invariably been stated to occur either on the tip or sides, this one being on the dorsum, a site on which we usually find a gumma.

(Contiaued in next issue)



Bran Is Made Delightful

Hidden in Wheat Flakes

We hide flake bran in rolled wheat flakes, so that users hardly suspect it.

The result is a flavory dainty, welcome every morning.

Not so efficient as clear bran, perhaps, if people will eat clear bran. But they quit it, as you know.

Pettijohn's is something they don't quit. With Pettijohn's Flour it supplies a bran food for every meal, if wanted.

We made Pettijohn's to please our doctor friends. And thousands of other doctors have come to recommend it. It is certainly the most popular bran food made.

Pettijohn's

Rolled Wheat with Bran Flakes

Soft, flavory wheat rolled into luscious flakes, hiding 25 per cent of unground bran. A famous breakfast dainty.

Pettijohn's Flour is 75 per cent fine patent flour mixed with 25 per cent tender bran flakes. To be used like Graham flour in any recipe; but better, because the bran is unground.

The Quaker Oats Company

Chicago

(1754)

This Page Reserved for
The Florence Infirmary
of Florence, S. C.

The Journal OF THE South Carolina Medical Association

Published Every Month Under the Direction of the Board of Councilors.

Entered as second-class matter February 9, 1916, at the post office at Greenville, South Carolina, under the Act of March 3, 1879.

Annual Subscription, $2.00. EDGAR A. HINES, M. D., Editor-in-Chief, Seneca, S. C.

ASSOCIATE EDITORS.

INTERNAL MEDICINE.
J. H. GIBBES, M. D., Columbia, S. C.

PEDIATRICS.
WM. WESTON, M. D., Columbia, S. C.
R. M. POLLITZER, M. D., Children Hospital, Boston, Mass.

OBSTETRICS AND GYNECOLOGY.
ATMAR SMITH, M. D., Charleston, S. C.

GENITO-URINARY DISEASES AND SEROLOGY
M. H. WYMAN, M. D., Columbia, S. C.

SURGERY.
G. T. TYLER, M. D., Greenville, S. C.
R. LEE SANDERS, Mayo Clinic, Rochester, Minn.

PUBLIC HEALTH.
J. LaBRUCE WARD, M. D., Columbia, S. C.

EYE, EAR, NOSE, AND THROAT.
E. W. CARPENTER, M. D., Greenville, S. C.

EDITORIAL

CHILD WELFARE WORK IN COLUMBIA.

The first organized child welfare work done in Columbia was through a childrens clinic which was held at Satterlee Settlement House in the Granby Mill village. The work was made possible by the Columbia physicians who gave their services, it was begun about fifteen years ago. Several years later the Mill Company established a Medical Dispensary and employed a visiting nurse. Since that time the childrens clinic has been held at the dispensary. Dr. Wm. Weston holds a baby clinic once a week. The nurses demonstrate the proper preparation of the formulas and follow up each case in the home. The mothers are taught the proper care of their infants through mothers clubs and classes as well as by individual work. The clinic is well equipped for minor operations, but they only average about three operations per month, most of them being tonsil and adenoid cases.

In 1913 the Columbia Childrens Clinic Association was formed and through the Co-operation of citizens of Columbia and the generous interest and donations of the physicians and dentists the Columbia Childrens Clinic was built and equipped. Through volunteer work a staff of physicians and of dentists is maintained. Two dental clinics are held each week and an average of seventeen children are treated per month. The average number of tonsil and adenoid operations per month is about fifteen.

Mothers Club meetings are held every month where the women are instructed in the care of their babies by the nurse in charge. A little mothers club has also been formed for the

purpose of teaching the younger girls the proper care of babies, as it is often the case that the little brother or sister is left in their care while the mothers are at work.

Through the co-operation of the University Y. M. C. A. members, a Better Boys Club was organized this year. They have drills and Bible Study once a week.

A much needed Day Nursery has lately been established in connection with the clinic.

In March 1917 the school board of Columbia employed a nurse to work with the physicians of Columbia in making inspection of all the school children and to do the follow up work, and to promote health work in the school along various lines. About thirty-three of the physicians gave their services in making the examinations. Following is a report of the work.

No. of children inspected	2839
No. of children defective	1999
No. of cases defective teeth	1179
No. of adenoids	286
No. of hypertrophied tonsils	875
No. of Adenitis	272
No. of Defective vision	288
No. of Conjunctivitis	203
No. of Defective hearing	69
No. of Discharging ear	4
No. of Anemic	161
No. of Skin diseases	25
No. of Pediculosis	133

Report of cases treated up to October 1st.

Dental treatment	651
T. and A. operations	130
Oculist or Optician	59
Treated by physician	38
Examined by physician	11

Each month a routine examination is made by the nurse. Symptoms of contagion are looked for and all suspicious cases are excluded until a certificate from a physician or Health Officer is secured. During the inspection each child is graded on personal hygiene and the mark is put on the monthly report. Talks on health are made to each class after the routine inspection. It is not possible for one nurse to do really adequate work for nearly four thousand children, but by the financial aid from the Federal Government we hope to have a whole time school physician and two additional nurses very soon.

V. M. Gibbes, School Nurse.

CHILD WELFARE IN WAR-TIME.

From the Childrens Bureau of the U. S. for this issue of the Journal.

Never was work to preserve the lives and health of children of such importance as now in war-time. Reports from the foreign countries which have now been at war for over three years show very definitely that they have recognized this fact. In the face of great difficulties due to the war situation the efforts to save the lives of babies have been redoubled. Besides this much has been done to protect the lives of mothers; for it has been realized that babies can not be safeguarded unless their mothers are protected. From Paris we hear that never have mothers and babies been so well cared for as since the outbreak of war. From England we learn that the government from the first day of the war, has increased the efforts made to lower the death rates of infants and mothers. The number of health visitors, or women doing the work carried on in this country by public health nurses doing infant welfare and prenatal work has been greatly increased, as has also the number of infant welfare stations—centers where mothers can go to ob-

tain simple advice in the care of their babies and of themselves during pregnancy. Much educational work has been done to show parents the well established facts about proper care of babies and children. A Baby Week was held this year in England. And all this work has borne fruit. In 1916 the infant-death-rate for England and Wales was actually lower than for any year on record.

Perhaps even more significant is the fact that even in Belgium so much attention was from the first devoted to the welfare of babies, that (according to the meagre reports available) the baby death-rate in certain of the large cities was less during the years of war than in time of peace. In the face of the conditions which have existed in Belgium, such a decrease means clearly that tremendous effort has been devoted to the cause.

In this country too, the war should bring redoubled effort for the protection of babies and children. We know that year after year in the United States the lives of at least 15,000 women and 300,000 children under five years are lost, though most of these deaths might be prevented. The war gives a new and tragic importance to efforts to reduce this needless waste of life.

It is more difficult to carry on work for this purpose in war-time; popular interest is diverted by appeals more dramatic or urgent, nurses and physicians trained for the work are called to military duty—yet it should be realized that the saving of the lives of babies is a war-service of the greatest importance.

The following are some of the ways in which an increase in work for babies and children may well be made:

State Departments of Health may well increase their activities for the protection of Children through the establishment of State Divisions or Bureaus of Child Hygiene. Six States now have these divisions: Kansas, Massachusetts, Montana, New York, New Jersey, and Ohio.

In Massachusetts the State Division of Child Hygiene in Co-operation with a State Committee on Child Conservation is carrying on, since the war, emergency work for the protection of mothers and babies. In Ohio and Kansas the Directors of the State Divisions of Child Hygiene are chairmen of the Child Welfare Committees of the State Council of National Defense and are outlining emergency work to protect children.

Public Health Nurses

In cities both in this country and abroad it has been demonstrated that an essential in any plan to save the lives of mothers and babies is the public health nurse or health visitor, a trained woman who gives to mothers in their own homes help and instruction in caring for babies. These nurses supplement the doctor's services in keeping the baby well; they persuade pregnant mothers to seek early the advice of a physician, and show her by demonstration in her own home how to carry out his advice.

In addition to instruction, many public health nurses give nursing care during the lying-in period and in the event of any illness of the baby or other member of the family.

In the school the public-health nurse finds an excellent opportunity to discover any physical defects that may be developing in the school child. She looks for symptoms of eye strain, of adenoids and enlarged tonsils, of poor teeth, of malnutrition, of nervous disease, of heart disease, or of contagious disease. By home visits she persuades the parents of children showing these symptoms to have them

examined and treated by their family physician.

Another important duty of the public health nurse is to discover tuberculosis in its early stages, to assist the patient to secure immediate treatment looking toward the arrest of the disease, and to teach him how to protect his family and associates from infection.

By formation of health leagues, little mothers' classes, mothers' clubs, girl scout classes in hygiene and home nursing, or other similar clubs and classes, the nurse seeks to carry the knowledge of the laws of health into the homes.

While the work of the public health nurse was first proved of value in cities, recent years have shown that in rural districts there is even greater need for her services. Rural public health nursing has been worked out with great success in many rural counties and smaller districts in many parts of the United States and Canada.

The cost of employing a public health nurse depends somewhat on local conditions. The salary of a nurse qualified to do this work varies between $75 and $125 a month. In addition allowance must be made for transportation, telephone, and incidental expenses. The cost of a nursing service is in some cases met by private subscription, in others by public funds, in others by a combination of the two. Many boards of education and health departments, city or county, now employ nurses; and there is a constant tendency for them to take over the work of private organizations, after the value of the work has been proved locally.

In several States laws have been passed allowing county boards of supervisors to appropriate money for the employment of nurses; and counties are demonstrating that they are progressive by taking the lead in carrying on nursing services supported by public funds.

Last year the Children's Bureau made a study of the death-rate of mothers from conditions connected with childbirth in the United States. This study brought out these two astonishing facts: In 1913 more women between 15 and 44 years died from the complications of childbirth than from any disease except tuberculosis; from 1900 to 1913 there was no decrease in the death-rate from these conditions as shown by the records.

In addition it was found that the death rate from these causes in the registration area of the United States is higher than those of all but two of a group of fifteen of the important foreign countries.

What is the cause of these conditions in this country? At the root of the matter apparently lie two chief causes: First, general ignorance of the dangers connected with childbirth and the need of skilled care and proper hygiene in order to prevent them; second, such difficulties related to the provision of proper obstetrical care as are characteristic of conditions in this country.

The provision of proper care in rural districts is in especial a great problem in the United States. Letters coming to the Children's Bureau from women on isolated farms in all parts of the country have shown how hard it is for these women to obtain the supervision and care which the Children's Bureau recommends as necessary in order that the complications of pregnancy and confinement may be prevented.

The Children's Bureau during the past year has been making a series of studies of the welfare of children and mothers in typical rural districts in many sections of the country. In each

of these districts the need has been manifest for rural public health nurses. These nurses would visit the mothers in their homes, urge them to seek medical advice early, especially where any danger signs of complications occur, and assist the physician at the time of delivery, and during the lying-in period.

That the work of public health nurses for mothers and babies in rural district or city alike is now more important than ever before in view of the war has been demonstrated by the experience of the other countries at war.

LAW ESTABLISHING THE CHILDREN'S BUREAU.

An Act to establish in the Department of Commerce and Labor a bureau to be known as the Children's Bureau.

(62d Cong., 2d session. S. 252. Public, No. 116.)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be established in the Department of Commerce and Labor a bureau to be known as the Children's Bureau.

Sec. 2. That the said bureau shall be under the direction of a chief, to be appointed by the President, by and with the advice and consent of the Senate, and who shall receive an annual compensation of five thousand dollars. The said bureau shall investigate and report to said department upon all matters pertaining to the welfare of children and child life among all classes of our people, and shall especially investigate the questions of infant mortality, the birth rate, orphanage, juvenile courts, desertion, dangerous occupations, accidents and diseases of children, employment, legislation affecting children in the several States and Territories. But no official, or agent, or representative of said bureau shall, over the objection of the head of the family, enter any house used exclusively as a family residence. The chief of said bureau may from time to time publish the results of these investigations in such manner and to such extent as may be prescribed by the Secretary of Commerce and Labor.

Sec. 3. That there shall be in said bureau, until otherwise provided for by law, an assistant chief, to be appointed by the Secretary of Commerce and Labor, who shall receive an annual compensation of two thousand four hundred dollars; one private secretary to the chief of the bureau, who shall receive an annual compensation of one thousand five hundred dollars; one statistical expert, at two thousand dollars; two clerks of class four; two clerks of class three; one clerk of class two; one clerk of class one; one clerk, at one thousand dollars; one copyist, at nine hundred dollars; one special agent, at one thousand four hundred dollars; one special agent, at one thousand two hundred dollars, and one messenger at eight hundred and forty dollars.

Sec. 4. That the Secretary of Commerce and Labor is hereby directed to furnish sufficient quarters for the work of this bureau at an annual rental not to exceed two thousand dollars.

Sec. 5. That this Act shall take effect and be in force from and after its passage.

Approved, April 9, 1912.

BUREAU OF CHILD HYGIENE FOR SOUTH CAROLINA.

After exhaustive investigation extending over a long period of time and covering nearly the entire civilized world we unqualifiedly suggest a Bureau of Child Hygiene of the South Carolina State Board of Health as an urgent necessity in the interest of our children at the present time. Most of the European nations long ago established such divisions, but we of the United States have just begun really to take a deep interest in this matter. The Bureau at Washington is but five years old. The States creating such Bureaus very recently are New York, New Jersey, Ohio, and Kansas. There may be a few others carrying out the same idea in a little different way. We know this is true of Massachusetts. Governor Whitman of New York was so profoundly impressed with the magnificient life saving work done by the Bureau of Child Hygiene of the City of New York that one of his first official acts was to urge such a Bureau for the entire State so that every child even to the remotest rural districts might receive the same marvelous benefits. The writer feels the same way about the Children of South Carolina and believes that the State should provide for every child the life saving facilities that many cities have long provided.

U. S. CHILDRENS BUREAU BEGINS WORK IN SOUTH CAROLINA.

At the request of the State Board of Health the Childrens Bureau of the Federal Government has begun work in Orangeburg County.

These highly trained experts will investigate every phase of Infant Mortality and the results will prove of the greatest benefit to our State.

MEDICAL INSPECTION OF SCHOOLS LAW FOR SOUTH CAROLINA.

As is well known South Carolina was a pioneer Southern State in the agitation of a Medical Inspection of Schools Law. Twice such a law was enacted but vetoed by a former Governor. We know of no one now who seriously objects to such a law and the time is opportune for its enactment. Governor Manning has clearly in the past, approved of this measure and no doubt will do so again. Our Sister State of North Carolina under the inspiration of the State Board of Health and her humanitarian Governor enacted such a law in 1917 and on the first of November its beneficent provision was extended to every school child in the State. We publish the law for information of our readers.

NORTH CAROLINA SCHOOL INSPECTION LAW.

An Act to provide for the physical examination of the school children of the State at regular intervals.

The General Assembly of North Carolina do enact:

Sec. 1. That it shall be the duty of the State Board of Health and the State Superintendent of Public Instruction to prepare and distribute to the teachers in all of the public schools of North Carolina instructions and rules and regulations for the physical examination of pupils attending the public schools. The State Board of Health shall have these instructions, rules and regulations explained to the teachers in every county in the State by some competent physician.

Sec. 2. Upon receipt of such instructions, rules and regulations, and after they shall have been explained by a physician, it shall be the duty of every teacher in the public schools to make a physical examination of every child attending the school and enter on cards furnished by the State Board of Health a record of such examination. The examination shall be made at the time directed by the State Board of Health and the State Superintendent of Public Instruction, but every child shall be examined at least once every three years. The State Board of Health and the State Superintendent of Public Instruction shall so arrange the work as to cover the entire State once in every three years.

Sec. 3. The teacher shall transmit the record cards made by him to a physician in the county designated by the county board of education, and if any teacher shall fail to make such examinations or transmit such records he may, upon complaint of the State Board of Health and the State Superintendent of Public Instruction, have his teacher's certificate revoked.

Sec. 4. The State Board of Health shall designate in each county of the State a physician to whom the record cards made out by the teacher shall be sent, provided that in counties having a whole-time health officer such officers shall be designated. Upon receipt of the record cards the physician shall carefully study the same and shall notify the parent or guardian of every child whose cards show a serious physical defect, as defined by the State Board of Health, to bring such child before him on some Saturday named by the physician between the hours of nine a. m. and five p. m. for the purpose of having said child thoroughly examined, and if upon receipt of such notice any parent or guardian shall fail or refuse to bring said child to the physician without good cause shown, he shall be guilty of a misdemeanor, and shall be fined not more than fifty dollars or imprisoned not more than thirty days.

Sec. 5. The physician designated to make such examinations shall receive as compensation for his services the sum of sixty cents for each child examined, the same to be paid by the county commissioners of the county: **Provided,** that under no circumstances shall the total amount paid the physician for such examinations be more than seven dollars and fifty cents per hundred children enrolled in the public schools of the county; and **Provided further,**. that whole-time county health officers shall receive no additional compensation for making such examinations.

Sec. 6. After such examinations the physician shall notify the parent or guardian of each child of any defect discovered by him, and shall advise such parent or guardian of the treatment that ought to be given the child.

Sec. 7. The State Board of Health and the State Superintendent of Public Instruction are authorized to make arrange-

ments with the physicians and dentists of each county to treat the school children found upon such examinations to have physical defects upon a reduced schedule of fees; if a satisfactory arrangement can be made, then the State Board of Health is authorized to pay twenty per cent of such reduced cost of treatment, provided the county commissioners will pay twenty per cent of such cost of treatment.

Sec. 8. For the purpose of aiding in the treatment of children found to be defective under the provisions of this act, a special appropriation of ten thousand dollars per annum, or so much thereof as may be necessary, is made to the State Board of Health. No part of this appropriation shall be used for any purpose other than aiding in the treatment of school children under the provisions of this act.

Sec. 9. This act shall be in effect from and after its ratification.

Ratified this the 7th day of March, A. D. 1917.

SYMPOSIUM PAPERS ON INFANT MORTALITY PUBLISHED.

Many of our readers will remember that at the Spartanburg meeting of the State Association an important Symposium on Infant Mortality was provided. The Association appeared to take a deep interest in the facts brought out and we give space to some of these papers in this number of the Journal.

A CHILD WELFARE NUMBER IN WINTER.

It may appear to some of our readers out of the ordinary to present a special Child Welfare number of the Journal in the month of December. So it would have been a few years ago when the attention of the medical world was concentrated on intensive Child Welfare Work exclusively during the summer months. Why this should have been the custom is difficult to understand in the light of modern developments and study. Time was however, (and it is so now in many non-progressive localities) when the morbidity and mortality of infant life was appalling in the summer months especially from intestinal diseases. We held climatic conditions largely responsible for so much suffering and death. We know now that temperature is only one factor among many others. We know that a pure milk supply is of fundamental importance. We know also that proper sanitation generally is a fundamental principle to be observed to the letter in all measures looking to the conservation of child life, even more so than in the preservation of adult life. Preventive medicine then has brought to childhood a greater boon than it has to maturer years. The Bureau of the Census of the United States brings again to our attention on November the 27th. the fact that the mortality from some of the diseases of midlife are steadily on the increase whereas it has been clearly proven that the reverse is true in regard to child life. We have every assurance that where continued effort has been expended to the end that the child be given a fighting chance for life, success rarely fails. Any unbiased observer who studies the recent statistics of say New York City will be profoundly impressed with this fact **Continued Effort.** What does continued effort mean? It means first of all prenatal care and birth registration, it means far better obstetrics than obtains over the greater part of the United States, it means applying preventive medicine in the home, in the school, in all institutions where children are reared. It means concentrated education as to the value of breast feeding and the tremendous responsibility assumed by every individual who advises otherwise. How are we to bring these conditions to every community, in South Carolina and the South? The answer is not extremely difficult. The

machinery while complicated and far reaching is not impossible to assemble. In the scheme of carrying out the mandates of modern preventive medicine everywhere it has been tried takes money, but it always pays. It is no longer an experiment. The phase of preventive measures under discussion should not be approached as merely a side issue. The powers that he must provide the means which the gravity of the object in view demands. Clearly the proposition is no longer solved by a spasmodic summer time propaganda but is an all the year around proposition, in season and out of season if we may now make use of such an expression.

CHILD WELFARE WORK IN CHARLESTON.

In the city of Charleston there are today a large number of institutions and organizations which take care of children in health and disease. The oldest public charity for children is the Charleston Orphan House. This was founded 127 years ago. In a very large building on a 3 acre lot there are housed and educated almost 300 orphans. In addition to the regular studies they are taught music and several of the industrial arts. Admission is absolutely free to all of any denomination from 3 to 12 years. Miss M. L. Lequex is superintendent and Dr. T. Grange Simons physician. In the building is a hospital ward. Naturally at times epidemics of the exanthemata occur but the general health is excellent. In the past five years there has been but one death.

The City Orphan Asylum is a similar but smaller institution. It is under Catholic supervision.

"The Nursery" at 97 Drake Street maintained by the City Union of Kings Daughters boards and lodges children up to ten years, though a large number of their inmates are nurslings. It was established ten years ago by the Rev. A. E. Cornish and when taken over by the present management only housed children during the day. It has a sleeping capacity of eighteen but is unlimited by day. Many mothers leave their little ones there while they are at work. Last year forty-seven children were taken in; the average charge is about 75cts per week. The city grants an extremely small appropriation.

The Industrial School for colored orphans which is partly supported by the city, cared for 200 negro children last year. They are taught useful industrial arts and prevented from becoming ignorant idlers and in time a menace to civilization.

About two years ago the Juvenile Protective League was formed. This has proved to be of great social value. A special officer is maintained who attends to all criminals and delinquents under the age of 18. Thus the City Police Court is free from this work and these children are not made into criminals.

Recognizing the need for full exhibition of the play instinct several municipal playgrounds have been established. Thus the child is kept off the crowded streets and kept out of mischief. One for the colored race is about to be opened.

The public school system comprises eight large fairly modern buildings. Three of these are for colored children. The colored industrial school should provide a plentiful supply of trained cooks, seamstresses and mechanics.

For children under school age several nominally free kindergartens are maintaned. This is a very impor-

tant field and should be a part of the public system.

Recently a new local society has been formed for the study of feeblemindedness. It hopes to awake public opinion to the importance of this subject.

The Roper Hospital a city institution, managed by the Medical Society, has as yet no special ward for children, but admits them to large special rooms and selected porches. A large number of medical and surgical cases are treated annually. A childrens hospital while greatly to be desired is apparently still far off.

The Roper Hospital Out Patient Clinic is held daily (except Sundays) in the basement. The Medical College has charge of this activity and its faculty supervise the work. Different rooms are assigned to the various specialties and each room is in charge of a physician who either is a specialist or specially interested in that branch. The daily hour is from 3.30 to 5. In the pediatric department are handled all cases under 12. Feeding cases along with the diseases of nutrition and the acute chronic infections make up most of the work. Immediately across the street at the Medical College the laboratory work on blood, urine, feces etc., is done. This close association is very helpful. From November 1, 1916 to November 1, 1917, 349 new cases were examined and treated.

The Shirras Dispensary is a small but very ancient free clinic where attention is given to several specialties. In the pediatric department last year 91 new cases were seen.

All in all, while the child here has not fully come into its rightful heritage yet quite a beginning has been made.

R. M. Pollitzer.

EARTH'S TRAGEDY.

To me, the Tragedy of this earth is a diseased child. The natural inheritance of a child is joy and strength and growth and freedom. He is robbed of it all by disease. To me, the most tragic indictment of civilization is a diseased child, civilization that stands still and lets a little child, through ignorance of his parent of his teacher or for any cause, be robbed of this divine inheritance of the joy and happiness of childhood, of the strength and growth of childhood! medical inspection is intended to help prevent that tragedy, to help remove that terrible indictment against our Christian civilization. The Physician and the teacher are necessarily the main agencies in this work. Medical inspection, then, opens a new door of larger service to childhood, and through childhood, to civilization and posterity.

Dr. J. Y. Joyner, in address before State Medical Inspectors, Raleigh, N. C., October 11, 1917.

GOVERNOR BICKETT ON MEDICAL INSPECTION.

Says Medical Inspection Work Must Save the Nation From Physical Decay.

It is a relief to find, in this time of killing, a body of men interested in the making of lives," said Governor T. W. Bickett in addressing the recent meeting of the State Medical School Inspectors in Raleigh. Governor Bickett said further that he thought the time had come when the process of repairing defective boys and girls and making them into strong, educated men and women had become a business the State and the country could no longer

neglect. He said it was bad economy not to spend money on keeping people well and on teaching them the laws of health. "It has been said that it is more of a disgrace for a man to go to the hospital than to jail. To make it necessary to have to go to the hospital," he explained, "the man must break the laws of God. Health laws are God's laws. To go to jail he must break only man's laws.

"That 60 per cent of the young men who were drafted into military service are rejected on account of physical defects which disqualify them for service," declared Governor Bickett, "is reason enough to justify the work that you physicians are now taking up. I am told that many of the defects that unfitted them for service could have been corrected in their school days. That only 40 per cent of our men, our best men, the pick of the flock, are found physically fit to serve their nation in what is perhaps its greatest hour of need, is subject enough to make the nation wake up and take thought for the men and women of tomorrow, if not for today. It is your work, doctors, with the school boys and girls of today that we are looking to save us from physical degeneration. In it all you have my interest and support. Call on me when you need me."

—WAR PROGRAM

NEW YORK.

November 19, 1917.

Dr. Edgar A. Hines, Editor, The Journal, South Carolina Medical Association, Seneca, South Carolina.

Dear Dr. Hines:

I was glad to note in the program of the last annual meeting of the South Carolina Medical Association, that so much time was devoted to the consideration of infant mortality and its prevention and to learn from your letter that the establishment of a Bureau of Child Hygiene is being considered by your State Board of Health.

I don't believe that health departments have any more important work before them than that of establishing such bureaux and entering actively into work of this nature. The urgent need of more aggressive methods for the improvement of conditions surrounding infant life and health, is apparent in every section of the country, but notably so in the South.

In this connection, the establishment of a public health nursing service is, of course, essential, as the work required is for the most part, educational in character and should be carried into small towns and villages and rural districts, and reach thus the mothers of the State. Probably, no cause of preventable infant deaths results in the loss of so many infants annually as that included in the phrase "ignorant motherhood," and it is against this ignorance that the efforts of those concerning themselves with infant welfare work must be most actively directed.

The public health nursing service, supplemented by clinics and dispensaries, where medical advice and treatment may be secured for those unable to supply it, where expert diagnoses may be available to small communities, would do more, I believe, to reduce infant mortality rates that any other class of work that may be undertaken.

Your State Board of Health is to be congratulated upon its interest in this matter and every citizen who has the interests of your State at heart, should use his utmost influence to secure the appropriations needed for this work.

Never before have our States and

cities found themselves more sorely in need of life conservation and, while every community is occupying itself with supplying its utmost in man power to the great conflict for democracy, none should forget that the terrific toll of life that will be taken, emphasizes more than ever the need of life conservation at home.

Assuring you of my best wishes for the success of this movement, believe me

Very truly yours,
C. E. Terry,
Health Editor, The Delineator.

A WAR PROGRAM.

8th Annual Meeting of the American Association for Study and Prevention of Infant Mortality Richmond, Va., Oct. 15-17, 1917.

The war has laid sudden and unexpected demands upon the organizations that are engaged in work for mothers and little children. Some are hampered by lack of funds, practically all by the scarcity of doctors and nurses. The increased responsibilities are being faced with the courage that comes of the conviction that no more patriotic service can be rendered just now than through the maintenance of the integrity of the home and the conservation of the health of the children of today—the citizens of tomorrow.

The program of the Eighth Annual Meeting of the American Association for Study and Prevention of Infant Mortality, held at Richmond, Va., Oct. 15-16, 1917, under the presidency of Dr. W. C. Woodward, of Washington, was arranged with special reference to these needs. The meeting was a practical, get-together conference of workers in the field of infant and maternal welfare. Representatives were present from 24 States, the District of Columbia and Canada.

The subjects discussed included the following:

1. Prenatal care by public and private organizations.
2. Special problems of obstetrical and infant care.
3. How the pediatrician and the obstetrician may co-operate in the prevention of the excessive mortality in the first month of life.
4. Care of children of pre-school age.
5. The effect of venereal diseases on infant mortality and the prevention of venereal diseases as a war measure.
6. Birth registration and certification from the viewpoint of war's demands.
7. Problems on nursing and social work that have arisen in connection with infant and maternal welfare work as a result of the war and the way in which they are being met.
8. War programs for the prevention of infant mortality, with suggestions for methods of procedure for rural communities as well as for large cities.
8. Review of reports on war work abroad.

Specific recommendations that were made as a result of the discussion were:

That greater emphasis be laid on prenatal care with all that this implies in the way of skilled obstetrical care;

That more intensive study be made of the care and diseases of the new-born and that the pediatric departments of medical schools be urged to make provision for such study in their curricula;

That the closest co-operation be secured between obstetrician and pediatrician in the study of prenatal conditions which may influence the life and health of the infant in utero and after birth;

That attention be directed to the fact that alcoholism is one known cause of degeneracy, both physical and mental before and after birth;

That attention be directed to the lack of disease-preventing activities for the child of pre-school age, and that to meet the immediate need the work of the infant welfare stations be extended to cover this period and that the establishment of special departments in hospitals and medical schools to provide care for children from two to six years, be urged;

That every possible effort be made to create a popular appreciation of the importance of the prompt and accurate registration of all births;

That the incidence of still-births be studied intensively and that uniform and rational statistical standards for the reporting of still-births be established;

That attention be directed to the effect of venereal diseases upon offspring and that strong and persistent effort be made toward further education of public sentiment in regard to the control of these diseases.

In his paper entitled "How the pediatrician and the obstetrician can

co-operate," Dr. J. C. Litzenberg, Minneapolis, emphasized the aid the obstetrician may give the pediatrist "by furthering prenatal care propaganda, by closing the hiatus between prenatal care and infant welfare, by direct notification with history of every birth and fundamental changes in the conduct of the teaching hospital by giving the pediatrist complete charge of new-born clinics." As his reasons for the latter innovation he stated that it would insure better care of the baby, stimulate increased research, and insure better pediatric teaching. He contended that the pediatrist by special training, methods of study and habits of thought is better fitted to attack the problem of the care of the new-born than is the obstetrician.

Speaking of the extension of the Registration Area for Births, Dr. Wm. H. Davis, Chief Statistician for Vital Statistics, Bureau of the Census, Washington, said:

"The Bureau of the Census is promoting better birth registration, particularly through the Birth Registration Area which was established in 1915. This area as at first constituted included the New England States, New York, Pennsylvania, Michigan, Minnesota and the District of Columbia, an area of only about 10 per cent of the territorial extent of the United States, but an area in which dwell about 31 per cent of the population of our country.

"Maryland was added in 1916 and in 1917 Virginia and Kentucky have already been admitted, while tests are now being made by special agents of the Bureau of the Census in Ohio and North Carolina.

"The outlook for better birth registration was never so bright as it is today. The present emergency has awakened the people as never before to the importance of this question. Indeed the outlook is excellent for a registration area for births which within two years will include two-thirds of the population of the United States.

"But even this hopeful outlook is not satisfying if a still better one is possible. This would be brought about if Congress would pass an amendment to the Constitution which would make compulsory the registration of every birth. As one prominent registrar expressed it. Such an amendment would advance the cause of birth registration twenty years."

In his paper on the "Reduction of Infant Mortality due to Prenatal and Obstetrical Conditions, by public Health Authorities," Dr. F. V. Beitler, of Baltimore, Registrar of Vital Statistics, of the Maryland State Department of Health, said:

"It will be necessary to obtain a scientific basis for work before establishing an effective organization for the relief of prenatal infant mortality. This no doubt must be sought in a field, which for obvious reasons is a difficult one from which to obtain correct data. There is, however, one method which appears promising i. e. the intensive study and rational statistical treatment of still-births. Karl Pearson in his essay on "The Chances of Death" estimated that for every 1000 live born children there were 605 stillborn, and Dr. Franklin P. Mall, Director of the Carnegie Laboratory of Embryology, stated recently, that it is his belief that the incidence of still-births is at least one half of the total number of live births. That these estimates can be reconciled to facts with which all sanitarians should be acquainted, one has to project the infant mortality incidence into the prenatal periods. It might be of interest to you to know that of 58,089 deaths under one month in the Registration Area in 1910, 25,672 or 61.-40 per cent were attributed to antenatal causes. It is axiomatic that the course of the mortality curve from the first to the thirtieth day of life is determined almost entirely by prenatal causes."

Dr. Frederick H. Bartlett of New York City, quoted figures from the report of the Registrar General for England and Wales, for 1915, and from the Department of Health of New York City, showing the ratio of deaths from syphilis to one thousand births to be approximately identical in the English and New York City reports—3 children die of syphilis in every two thousand births, but,

"No reference has thus far been made," he continued, "of the after effects of congenital syphilis in those cases that survive. These infants at different periods in their life may show the deforming effects of the disease in various ways. The disease may assail the bony tissue, causing deformities in the bones of the legs, or it may invade the bones of the nose, resulting in such complete destruction as to obliterate the bridge of the nose. It may invade tissues of the throat resulting in destruction of tissue with resulting hoarseness and modification of the voice. It may work its destructive effects in the

tissues of the central nervous system. In the last instance the effects may not be manifest until youth or middle age. The ultimate product of the effect in the central nervous system is imbecility or paralysis, or both combined. The disease may invade the eye, resulting in a total or partial blindness or in such destruction of its tissues as to cause unsightly scarring of the surface of the eye. The disease may manifest itself by partial or total deafness. This result may not appear until puberty or after. It is needless to enumerate the further effects of the disease. It is only necessary to remember that the organism which causes the disease may lodge in any of the tissues of the body and there carry on its destructive effects."

It would be profitable Dr. Bartlett said if a study could be made of the available knowledge on the subject in relation to conditions in the nations at war.

"Unfortunately it is impossible," he said, "to state in definite figures the toll of miscarriages and still-births for a definite number of syphilitic soldiers. But everyone must admit that a "national peril" exists in the form of a reducing birth rate, if there is a considerable number of soldiers infected with the disease. A carefully organized propaganda is under way in all the nations at war to encourage child-bearing. It is necessary, therefore, to check the spread of syphilis among the soldiers if they are to do their share in renewing the races after the war. Pautrier estimates that there are 200,000 soldiers infected with syphilis in the French army. If each of these cases accounts for only two still-births, the infection will account for 400,000 births."

The report of the Committee on Eugenics also dealt with the effect of venereal diseases on infant mortality. It was summarized by the Chairman, Dr. M. F. Guyer of the University of Wisconsin as follows:

Our report "favors strong and persistent effort toward further education of public sentiment and sketches out some of the important facts that should be common knowledge. It relates how the St. Louis Children's Hospital has succeded in compelling attendance of luetic children at the clinic. It advocates the compulsory placing of educational placards in public toilets and gives a sample statement of what it thinks might well be included in such notices. It believes that boards of health could advertise to good advantage in the newspapers regarding venereal diseases. It favors those forms of legislation which grant state and municipal boards of health power and funds to establish practicable regulations, rather than direct legislative enactments aimed at physicians and patients individually. It is of the opinion that every State should have well-equipped laboratories for free diagnosis of venereal diseases and feels that not only should there be free treatment for the indigent, but that it would be economy in the long run for the State to assist physicians in providing the more expensive forms of treatment for all patients. It maintains that there should be beds for venereal patients in general hospitals, and recommends that the Wassermann test be made a routine matter in every public hospital, prison, workhouse and institution for delinquents or defectives and believes that it might advantageously be applied to certain classes of venders and servants."

The advance that is being made in rural work for infant and maternal welfare was described by Dr. Grace L. Meigs of the Children's Bureau, Washington, Chairman of the Association's Committee on Rural Communities. Much progress is being made, but in all rural communities though differing greatly, in different parts of the country, the primary difficulty is the same. The great cost of providing adequate prenatal, confinement and postnatal care. The reports from the rural communities show that the progress is being made along two lines: Rural nursing and general educational work.

"Public health nursing," Dr. Meigs said "is without doubt one of the most important factors in the protection of mothers and babies in the country just as it is in the city. At present only a beginning has been made in providing a public health nursing service for mothers and babies in the country comparable to that in the city; that is, a service which includes all of the following: Prenatal care, nursing care at the time of confinement, advice and supervision in the care and feeding of the baby and the young child, nursing care in case of sickness.

County public health nursing is advancing. Many States have passed laws authorizing boards of county commissioners to employ nurses. The number of these nurses is increasing. County public health nursing usually begins with school nursing; in many cases it is amplified and includes prenatal and infant welfare work. One nurse in a county cannot reach all the mothers needing care; her work must be largely educational. Several county health centers have been established.

Rural township or community public health nursing is also being developed. In

a number of such rural districts nurses now succeed in carrying on every branch of infant welfare, prenatal and obstetrical nursing.

It is now more generally recognized that hospital provision for confinement cases in rural communities is a necessity.

In the field of educational work in prenatal and infant hygiene much is being done among rural women by the home economics extension divisions of the State Agricultural colleges.

The Children's Bureau is continuing its studies of maternity and child welfare in rural communities."

Interesting reports were presented during the meeting by representatives of organizations engaged in infant and maternal welfare work in different parts of the country, and which are affiliated with the Association. Over 150 organizations are now identified with the Association.

Mrs. Wm. Lowell Putnam of Boston, well known as a leader in prenatal work in this country, was elected President of the Association: Dr. Philip Van Ingen,New York, President-Elect for 1919; Dr. Henry F. Helmholz, Chicago, Secretary of the Board of Directors; Mr. Austin McLanahan, Baltimore, Treasurer; Miss Gertrude B. Knipp, 1211 Cathedral St., Baltimore, Executive Secretary. Executive Committee: The President, President-Elect, Secretary, Miss Minnie H. Ahrens, Chicago; Dr. H. J. Gerstenberger, Cleveland; Dr. S. McC. Hamill, Philadelphia; Dr. Langley Porter, San Francisco; Dr. Mary Sherwood, Baltimore; and Dr. W. C. Woodward, Washington.

The headquarters of the Association are at 1211 Cathedral Street, Baltimore.

CONTRIBUTORS TO THIS NUMBER.

We are under special obligations to several contributors to this number of the Journal.

We desire to mention Dr. Grace Meigs, Chief of the Division of Child Hygiene of the U. S. Childrens Bureau Washington, D. C.

Miss Gertrude B. Knipp, who abstracted the entire proceedings of the American Association for the Study and Prevention of Infant Mortality, Baltimore, Md.

Dr. Charles Terry, Health Editor of the Delineator, New York and Miss V. M. Gibbes of Columbia, S. C. Our thanks are due many others who gave us information both within and without the State.

BOYDEN NIMS
Chemist
MICROSCOPIST,
BACTERIOLOGIST
910-911 UNION BANK BUILDING
COLUMBIA, S. C.

My laboratory work has been relied on by over forty Columbia physicians for aid in the treatment of sickness in their own homes. What better indorsement could they furnish?

ORIGINAL ARTICLES

INFANT WELFARE WORK IN IOWA.

By L. Rosa H. Gantt, M. D., Spartanburg, S. C. Member Committee Health and Public Instruction S. C. Medical Association.

IOWA has always been known as the pioneer State in infant welfare work, for there it is that the Congress of Mothers originated, also there the first Better Baby Contest was held.

When the invitation came to go to Des Moines at the expense of the Iowa State Fair Association, to lecture to mothers on the care of the eyes, ears, nose and throat of their children, it was gladly accepted as affording an opportunity to know at first hand the wonderful work going on there for the betterment of the human race.

In Iowa, with its very superior live stock, hogs, cattle and poultry, they still think that fine children are quite worth while and are willing to spend a great deal of money in raising the standards of health.

The Baby Health Department is one of the largest departments, attracting as much if not more interest than other departments. Much of the credit of the successful work of this department is due the medical director, Dr. Lenna Meanes of Des Moines, who is also chairman of the Committee on Women's and Children's Welfare of the Council on Public Health Instruction of the A. M. A.

Dr. Meanes has seen this department grow from its very small beginning in a small tent to its present housing in its own section of the Women's and Children's Building, a handsome, three-story brick building costing about forty thousand dollars and fully equipped for the work carried on there. The section devoted to the children has on the second floor, large reception rooms, dressing rooms and small examination rooms for unruly children. On the third floor are living apartments for the physicians and assistants who come from a distance.

The main examination room is a very large beautiful room, enclosed from ceiling to floor on three sides with glass; just beyond this room and separated from it by an aisle is a small auditorium with raised seats, with a capacity of several hundred, and these seats are occupied all day by interested spectators and the relatives of the children under examination, who are in full view. This room is equipped with ten white tables, two white chairs for each table, and measuring boards, scales and all other necessary facilities, for no expense is counted too much for this department.

All of the workers here are women, for in the early days of the work it was found impossible to secure enough medical men in Des Moines to devote all day, every day for a week to this work, so the medical women of Des Moines, assisted by medical women of other parts of Iowa, now have the work entirely in charge and they give up their practice and many come from the far parts of the State to spend this week in working for better babies. The staff this year consisted of ten examiners or judges, two consultants, all physicians; one dentist, eight nurses, the superintendent, two assistant superintendents, a registrar and two official scorers. All entries for this department close two days previous

to opening of contest and a pamphlet is mailed to each parent, wherein is specified the day and hour for the child to appear for examination and this rule is rigidly adhered to and no exceptions made; otherwise it would be impossible to give a thorough examination and helpful talks to the mothers, for this year 435 children were entered. The official scorers work out the scores each day and the cards are mailed to parents, those scoring highest in the different classes are brought back for what is called "elimination day," when the prize winners are selected. The parents of these are sent telegrams and even those who live at a distance quite happily make another trip to Des Moines and the fair. Sometimes a third trip is made if the baby happens to be a champion.

The prizes for champions are very handsome silver loving cups and well worth a third trip. Other prizes are gold, silver and bronze medals.

A very pleasant feature of this contest was a musicale and reception given on the last day to the former prize winners and their parents and it was indeed an interesting, hopeful sight to see some children with as many as four medals pinned on them.

The objects of the Baby Health Conferences are:

a. To reduce infant mortality.

b. To improve babies and the race through them.

c. To educate the public interest in child welfare.

d. To give practical help in caring for babies.

e. To establish closer relations between parents and doctors in the field of preventive medicine.

The children are in classes not only as regards age and sex but also according to whether from cities, towns or villages, this latter to determine whether the healthiest babies are found in large or small cities or in rural communities.

In addition to the Baby Health Department the Iowa Infant Welfare Society has in one wing of the Women's and Children's Building its exhibits of all kinds of proper clothing, proper foods, proper furniture, etc., for children, and here conferences are held daily and the mothers given very valuable suggestions.

In the auditorium of the building, specialists and experts on infant welfare, deliver addresses to large audiences. Iowa is unique in having a Child Welfare Research station in connection with the State University, the aim of this station being the investigation of the best scientific method of conserving and developing the normal child, the dissemination of information acquired by such investigation, and the training of students for work in that field.

A STATE WIDE PLAN FOR INFANT AND MATENAL WELFARE.

By William Weston, M. D., Chief of Staff Children's Clinic, Columbia, S. C.

THE fundamental importance of protecting mothers and their infants while long a matter of governmental control in some of the European countries, seems to have escaped more than academic attention in this country until within the last decade. Isolated phases of the subject have been agitated from time to time, and some of the most glaring and patent wrongs to mothers and children have been corrected by legislative enactment. The evident need of seriously studying the question has become more apparent

Read in Symposium on Infant Mortality before S. C. Medical Association, Spartanburg, S. C., April 18, 1917.

and various organizations have undertaken the work. Notable among these is the American Association for the Study and Prevention of Infant Mortality. This association numbers among its great membership many of the most distinguished sociologists and pediatricians in the country. These men and women have entered upon the study of this intricate subject with a zeal and earnestness that is most commendable. In reading the reports of their meetings one is necessarily impressed with the exhaustive study that has been given to each question considered, and when a conclusion is reached and a recommendation is made we can be sure that it is not only the result of diligent study and careful investigation, but that some where the test has been made and the recommendation stands as its outcome. The brilliant results obtained by the Board of Health of the City of New York in the spectacular drop in the morbidity rate in infants and young children may be directly traced to the work of this association. In discussing the matter with one of the most distinguished and enthusiastic members, he told me that after the association had made its recommendations there was the most general and efficient cooperation from all the various organizations who were taking part in this work with the board of health, and that no little of the credit for success was due to the willing and steady cooperation of the press. The plan instituted in New York was most comprehensive and thorough, and it is unfortunate that time does not permit us to enter fully into the details of it here.

So far I know of no plan that contemplates a state wide application that has met the test of trial. I presume that our experience here will be what the experience of others has been in other communities, i. e. a gradual spread. Conditions in South Carolina are not very different from conditions in other sections of the country, with the one exception of our racial differences, and even they are not irreconcilable, because, the work can be done for each race separately. The plan about to be suggested has so far only been applied to the white race, although it must eventually be conducted among the negroes as well. The plan offered is founded upon our experience in Columbia, where conditions are similar to many other localities in the State. Our work is based upon a central dispensary for the care and treatment of infants and children. The work is organized as follows: Medical department, general surgery, orthopedic surgery, eye, ear, nose, and throat, dental, and welfare. The latter department has its mothers clubs, its cooking classes, its girl clubs where sewing and cooking is taught. The girls are given lessons in how to look after the baby if there is one in the family. There are also boys clubs where are taught many things applicable to their sex. Adjoining the main building is a spacious play ground for the children. Here the mothers and children meet, they become familiar with the efforts of the physicians and nurses, the nurses and themselves work together, they read literature especially adapted to their needs, they see pictures illustrating different conditions, and more important than anything else they have personal knowledge of results which gains their confidence and good will. The numerous object lessons make deep and lasting impressions.

I feel justified by experience to speak briefly of the mothers meetings, because it is here that is really taught the many advantages of the liberal use of water, the healthful influence of fresh air and sunshine. They are taught

the relative value of foods and how to prepare them so as to obtain the maximum benefit. They are taught that in order to bear healthy children, that they must be healthy, properly fed, and live in good hygienic surroundings. That in order for the baby to be strong and well it must receive for at least ten months an abundance of breast milk, and that for the next two months the breast milk may be supplemented by clean cow's milk, which has been obtained from either a common cow, a Holstein, or from a herd, but under no circumstances from a Jersey cow. They are urged to inquire whether the milk supply comes from cattle that have been tested for tuberculosis. They are shown how at little expense the milk can be kept fresh and protected from germs. They are shown how to best protect the baby from flies and other insects at a very small cost.

They are warned about the dangerous effects of extremes of temperature.

This about covers the field for the industrial population.

For the well to do classes the problem is much more difficult. They feel that they do not need instruction themselves, but that their neighbor does, and when they attend lectures it is too often with some ulterior object in view or in a spirit of condescension. It is generally only through reading matter or personal instruction that they are reached. Here the press is a most important factor in an educational capacity.

Soon there will be in book form a most complete text book on these subjects. Then classes will be formed for the study of these problems, and much good will no doubt result.

I cannot close this paper without at least calling your attention to the very valuable work that is being done in this cause by the Federation of Woman's Clubs. They have undertaken the work in many localities with a most commendable zeal, and a seriousness of purpose that must command our admiration.

IMPROVEMENT OF RURAL OBSTETRICS WITH SPECIAL REFERENCE TO THE MIDWIFE.

By G. F. Klugh, M. D., Cross Hill, S. C.

IN looking over a series of 150 cases of labor in 6 years of country practice I was struck by the fact that with few exceptions the infant and maternal deaths were those previously attended by a Midwife. Most of these cases had been in labor over 24 hours and the following complications were found: Placenta Praevia; Antepartum Hemorrhage; Eclampsia; Transverse presentation; Retained placenta; Post partum hemorrhage; and Puerperal fever. This list is largely made up of emergency cases and an hour or two decides the Woman's fate. I lose one or two maternal cases every year, besides several infants from the midwife's ignorance. I believe some of these complications are caused by the midwife's ignorance of the different stages of labor. She has her patients strain and bear down during the first stage of labor causing displacement of the Foetus, and exhaustion of the patient.

I suppose every Physician in country practice encounters the same difficulties we do; if so, there are in S. C. several hundred preventable Maternal deaths every year and even more preventable deaths of Infants. These cases are usually Negroes tis true, but such a number of deaths from one

Read in Symposium on Infant Mortality before South Carolina Medical Association, Spartanburg, S. C., April 18, 1917.

cause is enough to make us look into the matter seriously.

We find the Literature full of articles by able men. Dr. C. W. Kollock of Charleston, S. C., read an able paper, "The Midwife" at the meeting of the S. C. Medical Association in Florence April 16, 1914. This was published in the Journal of the S. C. Medical Association December, 1914. This paper gives the history of Midwifery and describes the Midwife, her ignorance and incapacity. There was very little discussion of this important paper. In the American Journal of Obsterics, March, 1916, there are papers by Drs. Edgar, Baldy and DeLee with discussions by Dr. Williams and other prominent Obstetricians. These papers are by City Men and deal in an elaborate manner with statistics, making interesting reading. While they do not all agree, the weight of opinion is in favor of the registration and training of the midwife as a necessity for the present, with gradual elimination of the most ignorant. Personally, I can imagine no good they can do anywhere. In normal case they are not needed, and really make abnormal cases out of normal cases. In abnormal cases they keep the woman from having proper help and attention. We certainly do not need them in the country from any standpoint. Recently I attended a case of puerperal fever for three weeks and spent enough time to deliver a dozen women. Quite frequently we are engaged to deliver a woman but are not called if the midwife can get along without us. The country negro can pay a decent obstetrical fee, and would do it if the midwife were abolished. We can never get people to consider labor and prenatal care in the proper light as long as we allow the midwife to exist. Of course we cannot bring about ideal conditions in one year, perhaps not in ten or twenty years. However, we can and should make a start. If the midwife were placed without the pale of the law, she would gradually lose caste and attend fewer labors.

We have of late seen statements that midwifes have fewer deaths than Physicians, especially, Country Physicians. If this is true, we should turn all of our Obstetrical cases over to the midwife; anyway it should be a case of "The survival of the fittest." The reason City obstetricians favor the midwife if that they blindly follow statistics without analyzing them, and seeing where the statistics are in error. The reason for this startling statistical error is obvious, the Physician is called in time to see the patient die and sign the death certificate, while the midwife is exonerated from all blame. You may as well blame hospitals for a high mortality when we send them patients we cannot handle. The country Physician is a classmate of the city Physician, and quite as often a graduate of a Class A. Medical School. My Colleagues take blood pressure readings, make urinalyses and give prenatal care according to accepted practice of our best hospital men, and patients having such care rarely have trouble.

Besides maternal and infant mortality we have the morbidity to contend with, especially that resulting from lacerations and infection both of which should rarely occur in properly managed cases.

We as physicians are too prone to accept as true all of the opinions of authorities without investigation. Times change and our practices should keep pace with changed conditions. This problem and the problem of the illegal practitioner, who might well be styled a man midwife, cannot be handled by the individual, by the County Society or by the State Association.

We still see one or more illegal practitioners in each community contributing their full share of bad obstetrics. We have laws enough but no one is charged with their enforcement. This duty should devolve upon the State Board of Health which has no personal interests or entanglements with the financial and social aspects of any given case. Therefore I would suggest that the State Board of Health on behalf of the S. C. Medical Association be requested to take such steps as are necessary to do away with midwives and illegal practitioners as far as practicable. If license is given by any examination except age and ignorance the country midwife will be a relic of a barborous past. Such of the midwives can be licensed as have proper qualifications. In other words an examining board by requiring all midwives to pass an examination of moderate severity eliminate all country midwives and gradully raise the standards in cities where they seem to be needed. I do not propose a different law or standard for city and country midwives, but presuppose those in cities having attended schools of midwifery are better prepared.

Such a law would do away with a large proportion of midwives and have good moral and educational effect. This would ultimately, through raising of standards, do away with the midwife or make an obstetrician of her. Make it somebody's business to enforce the law like other health laws and keep the S. C. Board of Health in the lead by our united efforts.

To Summarise:

1st. Most of the maternal and infant deaths in this series, had no prenatal Care, were in charge of an ignorant midwife for 24 hours or more, and had developed complications demanding immediate surgical intervention, which was not at hand.

2nd. The midwife in rural districts has no qualifications whatever, and since the country practitioner is called in as a last resort he gets a chance to sign the death certificate and credit for bad obstetrics.

3rd. The mortality and morbidity from bad obstetrics by midwives demand active consideration of the State Board of Health and regulation of same.

4th. Registration after examination would have educational and moral effect, and lessen such practice.

5th. Last and most important, Physicians, county and state societies cannot enforce medical practice acts, and this function should be assumed by The State Board of Health.

PEDIATRICS FOR THE GENERAL PRACTITIONER.

By R. M. Pollitzer, M. D., Associate Professor of Pediatrics Medical College of the State of South Carolina, Charleston, South Carolina.

IT was only a few years ago, that nearly all of the ills of infancy and childhood were attributed to teething and worms.

The general practitioner then had a very easy time. He was hardly expected to make a physical examination and seldom asked for a diagnosis. Today with the spread of popular medical writings in the papers and magazines, people have come to realize that a child is due the same care and attention as an adult. People are less fatalistic in the presence of illness. They want a doctor to attend their little one and are not satisfied by the mere writing of a prescription.

In but few portions of this state are there specialists in Pediatrics, and

Read in Symposium on Infant Mortality before S. C. Medical Association, Spartanburg, S. C., April 18, 1917.

therefore the overtaxed and underpaid general practitioner finds himself called upon to practice pediatrics along with his obstetrics, surgery and medicine. Pediatrics has often been described as the specialty of the general practitioner. And indeed, it is remarkable how with limited training as a handicap; but with energy and common sense to offset it, many a man does creditable work and is of great value to his community.

There are some very essential details of pediatric practice which may well be recalled. During infancy our chief service is to supervise and regulate the feeding. It is to be regretted that many doctors still make the grievous error of taking a baby from the breast without sufficient justification, while others fail to see when artificial feeding has become necessary. It is a good plan in normal nursing to substitute one or two bottle feedings at six or seven months. It makes little difference what system of feeding we follow provided we understand the basic principles and take the trouble to work out the details. We should be able to determine exactly how much of each food principle the infant is taking and how many calories are being given. There is no more reason why a doctor should fail to calculate a food formula than to neglect to sterilize his hands and instruments before operating. Microscopic and gross examination of the stools is a very simple matter and furnishes considerable information, yet is too seldom carried out. It cannot be stated too often that for the infant that nothing takes the place of good human milk and that cow's milk ranks next. Notwithstanding this the average practitioner still advises condensed milk because of the ease of preparation and laziness on his part.

"Half the deaths of babies under one year are preventable." "It is estimated that in the United States one out of every eight babies dies during its first year and 88% of babies that die before the end of the first year are bottle fed."

"We are now coming to look upon infant mortality as evidence of human weakness, ignorance and cupidity." Infant mortality in some cities has been greatly decreased by popular education and milk stations. Earlier diagnosis and more efficient treatment will assist in a further decline.

Some how the impression prevails among the laity that once an infant has passed its first year, it may eat almost anything. People should be instructed to properly feed a child between its first and second years. This is the work of the doctor.

Assuming that the child has escaped death from malnutrition, enteric and respiratory disease and has successfully reached its second year, then a host of diseases lie in wait. The acute contagious diseases belong particularly to childhood. Children should be kept away from all who are sick. It is not necessary nor beneficial for them to contract measles or whooping cough. Measles and whooping cough frequently terminate in bronchopneumonia and measles undoubtedly predisposes to tuberculosis. During measles it is imperative to examine the ears, mouth and lungs frequently. In scarlet fever a common sense low-protein diet should be carefully ordered and the child kept in bed longer than is usually done. It must be remembered that diphtheria is not infrequently associated with it. Nasal and faucial diphtheria should be looked for in every patient as a routine procedure. To cure diphtheria we must treat it early with one sufficiently large dose of anti-toxin administered sub-cutaneously or better intravenously. In this

disease especially, it is not enough to recognize a complication but by oft repeated examinations, it should be found early.

Within recent years we have heard much of pyelitis in children. It is a common affection. Many of these cases remain undiagnosed for weeks, because of no urinary examination. It is not difficult to collect urine without catheterization even in infants.

Most diseases of the nervous system are fairly easy of recognition but not all of us are yet able to spot a case of tuberculous meningitis until quite late. In as much as cerebro-spinal meningitis is curable early, it behooves us to bear it in mind when ever there are signs of acute cerebral irritation, it may be positively diagnosed by an examination of the cerebro-spinal fluid. This we obtain by lumbar puncture. The procedure is most valuable and its technique should be acquired by all. If last years experience is repeated v in this country will again this summer have an epidemic of infantile paralysis. This killing and crippling disease is often unrecognizable without an examination of the spinal fluid. Judging from a large series of cases observed and treated I am unable to offer any hope of benefit from the adrenalin or serum treatment. However with but rest in bed, protection of the paralyzed muscles and subsequent orthopedic care, it is remarkable how far recovery may progress.

I might go on and discuss the importance of acute rheumatic fever, the frequency of tuberculosis and the common failure to recognize hereditary syphilis, but the whole subject can be abbreviated.

All of us while realizing the importance of a complete physical examination are woefully lacking in carrying it out. And having once made a diagnosis we are too often careless as to the future course of the disease. Often our first knowledge of a complicating otitis does not come until we see the purulent discharge. Many children die from empyema because we do not look for it until too late.

In Pediatrics our sins are chiefly those of omission. We fail to live up to a higher professional standard, not so much through ignorance but because we do not spend enough time over the patient.

A WAY TO CURE A CHILD OF ENTERIC INFECTION ACCOMPANIED BY GREENISH STOOLS.

By L. F. Robinson, M. D., Greenville, S. C.

IN the title of this paper, I want to use the word Cure reservedly, yet the results that I have gotten from the treatment later outlined, justifies the use of the word.

Among the greatest challenges that come to the skill of the general practitioner are intestinal troubles of children. As we know they occur most frequently in the 2nd summer of the child.

The cause of this trouble is primarily fat indigestion, the child is taken suddenly with vomiting, high fever and followed by diarrhoea. The baby being fed the same diet on, with the consequence that a fat intolerence is established.

The fat taken by a child is split into glycerine and fatty acid. The fatty acids being dissolved or emulsified and soaponified by the bile. If however, there is an excess of the fatty acids over the Alkalinity of the pancreatic juice and food, the bile may be decomposed and the fatty acids passing on as such will cause frequent acid stools. Nature tries to relieve this

Read in Symposium on Infant Mortality before S. C. Medical Association, Spartanburg, S. C., April 18, 1917.

condition by drawing on the Alkalies of the tissues to form soap. When these Alkalies are drawn from the tissues, great amounts of nitrogen are liberated and excreted in the urine resulting in Acidosis.

The Acidosis is not so much an acid condition of the blood as it is the absence of the alkalies in the blood, this wasting of the tissues gives us the picture of Marasmus with all evidence of malnutrition.

It is not definitely known what causes the green stool, but it is most likely bacilli and their products. Carbo-Hydrates play a part in this fermentation.

TREATMENT. The treatment is first to eliminate the greenish stool by giving Castor oil. The oil must be given till there is no green color to the stool. A teaspoonful to a table spoonful, according to age of the child, every hour till this is effected, or until 6 or 8 doses are given, if this course is not sufficient, we wait 8 to 12 hours and commence the oil and give as before, nothing being given in the meantime except water and cereal gruels.

When every thing has been thoroughly eliminated from the bowels we are ready to begin to feed, if the child is not weaned the mothers' milk is diluted by giving the child boiled water before each nursing. The Mothers milk should be tested.

If the child is bottle fed malt soup is given, this is a fat free mixture and is made as follows:

For child 3 months old.

Skimmed milk..... 10 0z
Malt Soup Extract .....1 z
Prepared flour ..... 2 z
Water to make ..... 18 z

First put the flour in a dry bowl, add a small amount of milk and mix thoroughly to avoid lumps then add the remaining milk. Second, Mix the malt soup extract and the water together, then mix all together in a double boiler and let simmer for 30 minutes, adding enough boiled water to make 28 ozs, divide into 7 bottles cool quickly and put on ice.

A child should practically never be fed oftener than every 3 hours giving water, between feedings if it should seem to want something to drink.

If the stools are too frequent when using this mixture, two grains of Bicarb, Soda is added to each bottle. If the stools are offensive and the color is not right after using the malt soup for a while, cut out the milk again giving the cereal gruel in the meantime give hourly doses of castor oil again. In 12 to 24 hours resume the malt soup again.

When the child shows his ability to digest the malt soup we increase the amount of skimmed milk in it one or two ozs each each day until he is getting 16 ozs a day. This is for a three months old child, if the child is older of course the amount of skimmed milk can be increased more. After the skimmed milk has been worked up the malt soup extract and flour should be increased, the flour always being double as much as the malt soup extract.

If you want to get results from this you must ignore the directions on the bottle of the malt soup extract, for the directions are for entirely too much.

When the child is taking a reasonable amount of skimmed milk, malt soup extract and flour, cream may be added very cautiously in the form of whole milk, until he is getting in his mixture, 45 calories per pound weight, per day. The child should have a small amount of orange juice each day while taking malt soup.

CHILD WELFARE WORK IN THE RURAL DISTRICTS OF SOUTH CAROLINA.

By L. A. Riser, M. D., Director of Rural Sanitation and Assistant Secretary State Board of Health, Columbia, S. C.

NO part of our public health system has been so neglected as that of child welfare. The South Carolina State Board of Health through its department of rural Sanitation has been giving lectures in the schools of the State, and free treatment for hookworm disease, but otherwise very little has been done in the rural districts, where the work is most needed. This year in Greenwood and Orangeburg Counties, where this department is carrying on a campaign for the betterment of health conditions in the rural districts, we have had numerous requests for medical inspection of the schools, but our force has been too short to attempt very much work of this kind. These two counties gave $2,000.00 each this year through their delegations to assist in this health campaign, which has been going on since January 1st. We are asking these counties for $3,600.00 each next year, and in addition to our sanitation work, we propose to put on one or more nurses if they can be secured. The Darlington County Delegation has pledged itself to take up this work next year, and Anderson, York, Chester and Bamberg are seriously considering the matter.

It is a sad but true fact that the death rate is higher in the rural districts than in the cities, and this should not be true, as children in the rural districts do not live in crowded quarters as they do in cities—more children in the rural districts are breast fed than in the cities. While many women in the rural districts have to work in the fields, they are not required to be away from their babies at feeding time, as is the case with city women who are bread winners. It is simply a matter of education, and when the country woman has the same advantages of health education and prenatal care which the city woman has, the infant mortality rate in rural districts will fall much lower than that of the cities.

We are woefully lacking in trained public health nurses. Many nurses who have proven their fitness for bedside nursing, are entirely unfit for public health nursing. A public health nurse must be able to impart simple rules of health to others, and if she cannot do this, she is of little value.

The department of Rural Sanitation will supplement its past work with public health nurses next year, and every physician and medical society in South Carolina is urged to impress upon their delegation in the legislature the necessity for increased funds with which to carry on this work next year.

INFANT MORTALITY IN SOUTH CAROLINA AND THE SOUTH.

By E. A. Hines, M. D., Seneca, S. C. Member State Board of Health.

IN the Summer of 1916 I became interested in the subject of Infant Mortality from a Southern Standpoint and especially as to the deaths of infants under one year in South Carolina. The available literature to which I had access offered practically no information of importance. The Secretary of the American Association for study and Prevention of Infant Mortality wrote me: "I regret that it is impossible to send you specific information in regard to con-

Read in Symposium on Infant Mortality before S. C. Medical Association, Spartanburg, S. C., April 18, 1917.

ditions in Southern States and cities." I, therefore, made a trip to Washington in search of further light. I visited the United States Childrens Bureau and the authorities there were unable to locate in their material anything worth while from the Southern States. Next I sought the office of the Surgeon General of the United States Public Health Service. Assistant Surgeon General Trask was on duty, Surgeon General Blue being ill at that time. Dr. Trask was very kind to me, but regretted that the vital Statistics laws of the Southern States had hitherto been so inadequate that the Public Health Service had been unable to gather any statistics of value. Feeling that the court of last resort was the great library of the Surgeon General of the Army, I there made my desires known to Col. C. C. McColloch the librarian. Every assistance was offered me in my search for papers or books on Infant Mortality in the South. Though many hours were spent and thousands of books and titles investigated, the paucity of the literature discovered was most astonishing. I came back to South Carolina determined to at least make use of the invaluable records our own department of Vital Statistics had so carefully collected for the past two years.

At my request Mr. C. W. Miller Chief of the Bureau at Columbia tabulated for me the cause of death of every infant dying in South Carolina from August 1915 to July 1916. The task was of considerable magnitude in as much as such minute details are not required in the published reports. This special report covers each month and each County in detail and thus the seasonal death rate, the locality and the prevailing diseases are shown. The report is so voluminous that it may preclude publication, but a summary of the more striking causes of death is presented:

INFANT MORTALITY IN SOUTH CAROLINA FROM AUGUST 1ST, 1915 TO JULY 31ST, 1916.

Abdominal Distension	4
Abscess Spinal Column	1
Accidents	18
Asphyxiation	34
Asthenia	6
Atelectasis	33
Bronchitis	43
Burns	40
Cardiac Insufficiency	3
Cholera Infantum	114
Colic	4
Congestion of Lungs	21
Congestion	3
Convulsions	82
Diarrhoea	60
Diphtheria	27
Dysentery	212
Ear Abscess	2
Edema of Epiglottis	1
Embolism	72
Enteritis	119
Entero-Colitis	154
Endo Carditis Congenital	2
Frontal Sinus Infection	1
Gangrene Umbilical	1
Gastritis	54
Heart Disease Congenital	61
Hemorrhage	25
Hemorrhage Cord	27
Hemorrhage Kidneys	2
Homicide	2
Hydrocephalus	16
Icterus Neonatorum	16
Ilio Colitis	248
Inanition	228
Influenza	30
Indigestion Acute	47
Injury during delivery	32
Intestional Obstruction	16
Intestional Toxemia	29
Jaundice	23
Kidney Abscess	1
Liver Congestion	2
Malaria	3
Malnutrition	86
Marasmus	147
Meningitis	33
Meningitis Cerebro Spinal	15
Meningitis Septic	6
Nephritis	50
No Medical Attention	2200
Otitis Media	3
Pellagra	21
Peritonitis	10
Pneumonia Broncho	242
Pneumonia Lobar	183
Poliomyelitis	9
Poisoning	17
Premature	732
Pulmonary Insufficiency	6
Rachitis	8
Rheumatism	2
Scurvy	2

Septicemia Umbilical	2
Smothered and strangled	32
Snake bite	1
Spasms	7
Spina Bifida	9
Spinal Paralysis	1
Scarlet fever	3
Status Lymphaticus	1
Stomatitis Catarrhalis	2
Syphilis Congenital	60
Tetanus Neonatorum	28
Thrush	6
Tonsilitis	1
Toxemia Neonatorum	0
Tuberculosis	23
Typhoid	9
Ulcer	0
Ulcer Throat Malignant	1
Uremia	9
Whooping Cough	155
Worms Intestinal	1
	5,642
Still Births	2,890
Total Births	44,443
Total Deaths all years	21,946

Realizing that a great cotton manufacturing State such as South Carolina has become must necessarily present a highly complex problem of Infant Mortality, by special request, Dr. G. A. Wheeler and Mr. Sidenstricker Surgeon and Statstician respectively of the U. S. Public Health Service have kindly compiled for me the results of some observations in two cotton mill villages within the bounds of my own practice in Oconee County. These villages comprise a population of some two thousand people with economic conditions not unlike many other manufacturing towns in South Carolina and the South:

Infant Mortality in Newry and Seneca Mill Villages Among Families Constituting the Population in May and June, 1916.

The apparent difference between the two villages can not be taken as an index of conditions in the two villages since the population of Seneca was more shifting than that of Newry.

Classifying the families on the basis of their economic status (i. e. family income as shown by the mill payrolls and other data) into two groups, one including those above the average family income per adult male unit and the other including those whose income per adult male unit is below the average ($8 per adult male unit per half-month being the general average for mill worker's families), the following results are indicated:

Infant Mortality in Newry and Seneca Mill Villages among families constituting the population in May and June, 1916:

Village	Total live births in preceding year.	Total deaths in preceding year.	Death rate per 1,000 live births.
Newry	27	4	105.2
Seneca	19	2	148.2
Total	46	6	130.4

The rate 130.4 is in excess of the rate for the United States as a whole (approximately 124 per 1000 births).

Infant Mortality in Families of Different Economic Status.

Infant Mortality in families of different economic status:

Half-month income per adult male unit.	Total live births in preceding year.	Total deaths in preceding year.	Death rate per 1,000 live births.
Seneca: Under $8	13	2	153.8
$8 and over	6	0	0.0
Newry: Under $8	15	3	200.0
$8 and over	12	1	83.3
Both Villages:			
Under $8	28	5	178.6
$8 and over	18	1	55.5

A marked difference in the rate for the poor and the fairly well-to-do families is indicated which would appear to corroborate the results of the

Federal Childrens Bureau's Infant Mortality statistics in industrial and other localities.

I have culled from many sources the following historical facts bearing on the theme of this paper:

In the municipality of Sparata 2500 years ago a Committee of The State passed on the life of the new born child. If not promising the baby was exposed to death.

In the hey day of Roman supremacy the father held the power of life and death over his child. The midwife placed the new born infant on the lap of mother Earth and called the father, if he approved of his offspring he stooped and raised the child in his arms invoking the blessing of the gods. From this we get the expression "to raise the child." If not desirable it was exposed to death.

Julius Caesar wrote of Mothers who carried dogs in their arms instead of their own infants and finally legislative action was invoked to force parents to care for their offspring, but Christianity introduced into Rome first stemmed the tide of infanticide. Infanticide was practised by all the ancient nations, except the Hebrews and the Assyrians, and is practised yet by China and India to some extent.

In the middle ages the sentiment changed all over Europe in favor of the child. The religious orders founded hospitals and took them into the churches. France owing to the alarming falling off of her birth rate has made extraordinary efforts, and with success, to save her babies. Her methods have been followed everywhere. To Prof. Budin is due the leadership and there has been developed infant day nurseries, mothers societies, milk depots, consultations for mothers and infants and extra food for nursing mothers, pensions and rewards of various kinds.

England and Wales have made effective use of the trained nurse and health visitors direct to the homes of the poor.

Germany has developed a most rigid system of compulsory care of foundlings. Every foundling or illegitimate child is of supreme importance to the State. (How different in our average community.)

In the United States, many cities, many private agencies and numerous national organizations have been organized in the interest of the child. The most important of the latter is the American Association for the Study and Prevention of Infant Mortality founded in 1909 with headquarters at Baltimore, M. D.

Gradually then the State recognized the value of infant life and Henry VIII of England in 1538 ordered the book keeping to begin of all christenings, weddings and deaths.

The United States is practically behind all the rest of the civilized world and the South the last to take it up.

The Bureau of Child Hygiene of the United States Government is only about five years old and in South Carolina our vital statistics law is only a little over two years old. Most of the Southern States have the same history in this regard. In the North and East vital statistics have been kept in some States ten to twenty years, but the entire registration area includes even now only a little over half the States.

Practically all the advances in the Prevention of Infant Mortality have occured in the past 25 years. France, Germany, England and the United States in the last decade—especially New York City. The wonderful results from the intensive efforts in New York City has brought the death rate down from 181 per 1000 children born

1916.

In conclusion I feel that I may say, I have clearly shown the Infant Mortality rate in South Carolina to be appalling. The problem can only be solved by the State and best by the State Board of Health. A Division of Child Hygiene should be established at once and given ample funds to provide doctors and public health nurses to care not only for the infant but the child in the pre-school age and in the school. In addition the inseparable problem of prenatal care and maternal mortality would thus offer some hope of solution.

Read in the Symposium on Infant Mortality before the South Carolina Medical Association, Spartanburg, S. C., April 18, 1917.

DIVERTICULITIS OF THE LARGE INTESTINE.

After referring to a former article in which five cases of excision of the sigmoid for diverticulitis were described and which gave the first actual demonstration of the pathology, W. J. Mayo, Rochester, Minn., (Journal A. M. A., Sept. 8, 1917), reports the results of observations made in forty-two cases where portions of the large intestine were resected for this cause. The signs and symptoms closely resembled those of appendical inflammation excepting that in most instances the disorder was on the left side of the abdomen. It is highly probable, he thinks, that most of the reported cases of so-called sigmoiditis are examples of diverticulitis. He gives the weight and sex of the patients, about two-thirds of whom were males and in many of whom increased deposits of fat in the abdomen had undoubtedly some influence in the development of the diverticula, especially if there had been a tendency to the formation of instestinal gases. The average duration was two years,



Our Doctor Friends

Suggested this Bran Food

They found clear bran too uninviting. People would rarely continue.

They regard ground bran as inefficient. They wanted bran flakes.

So we took a famous wheat dainty—Pettijohn's—and made a bran food of it. Now these flavory flakes hide 25 per cent unground bran.

When we announced it, thousands of physicians wrote us for samples of it. And now people are serving about a million dishes weekly, largely by doctors' advice.

We believe that Pettijohn's Flakes and Pettijohn's Flour will solve the bran-food problem to your satisfaction.

Pettijohn's

Rolled Wheat with Bran Flakes

Soft, flavory wheat rolled into luscious flakes, hiding 25 per cent of unground bran. A famous breakfast dainty.

Pettijohn's Flour is 75 per cent fine patent flour mixed with 25 per cent tender bran flakes. To be used like Graham flour in any recipe; but better, because the bran is unground.

The Quaker Oats Company

Chicago

(1755)

the longest twelve, and the shortest seven days. In thirty-four of the forty-two patients a sensitive tumor was present in the left iliac fossa attended by localized peritonitis and often by intestinal obstruction. In two patients diverticula were found in the rectum. A diagnosis of inflammatory disease was made in twenty cases. The Roentgen rays showed obstruction, but in acute obstruction it did not differentiate from cancer though it usually did in chronic cases. Carcinoma was present in thirteen cases. Mayo divides the cases clinically into four groups. The first includes fleshly middle aged persons who present themselves with an acute sensitive tumefaction in the left iliac fossa which gradually disappears in a few days and is due to irritative effects of fecal concretions and other contents in the thin walled narrow necked sacs. There is a marked tendency to relapse, like that in appendicitis, but it does not always produce trouble as shown by the cases commonly observed in necropsies, Only in cases where the symptoms are serious, therefore, or the disease becomes chronic or relapsing, is operation needed. Group two are cases of diverticulitis and peridiverticulitis with abscess formation resulting in enterovesceal, enterocutaneous and other fistulas. The rule is that if an abscess forms it should be opened and drained but a serious attempt should not be made at the primary operation. They have had no fatal cses in their practice, which was to open the peritoneal cavity, dissect out the fistulous sacs and close the openings in the bladder and colon with chronic catgut. The immediate results were seldom satisfactory but a spontaneous closing of the secondary fistula that forms was generally obtained. In group three obstruction occurs, the result of infection and edema. The condition is practically identical with those of the previous group except for the existence of obstruction, the actual amount of which, however, was surprisingly small. A tumor was usually found and in 31 per cent. also malignant disease. The fourth group were cases with carcinoma developing on a diverticulum. Giffin found that for every sigmold resected for diverticulitis, seven had been resected for carcinoma. The development of carcinoma in this region may progress, slowly, but it is unwarranted to consider it primary when found. The close association of carcinoma with diverticulitis leads to the conclusion that when a tumor seeming to be diverticulitis but without acute symptoms is found in the sigmoid of colon, and especially if it only partly subsides and then continues as a chronic mass causing symptoms carcinomatous disease should be suspected and resection done. Of forty-two patients with diverticulitis with and without cancer, fourteen died as the result of the operation. It must be taken into consideration that these patients were usually fat and operation was necessary during the stage of obstruction, infection, etc.

THE FLORENCE INFIRMARY AND TRAINING SCHOOL FOR NURSES.

1-13 West Cheves St., Florence, South Carolina.

Established 1906.

A thoroughly equipped institution of 100 beds for the care of the private patients of Dr. F. H. McLeod.



True Fruit Flavors

Jiffy-Jell

For Quick, Fruity Gelatine Desserts



Flavors in Glass

Gelatine Dainties

With Unique Fascinations

FREE TRIAL LOTS

We urge physicians to ask us for a trial lot of Jiffy-Jell in various fruit flavors. It will give you a new conception of these ideal dainties for the sick and convalescent. One great distinction lies in the gelatine itself. Jiffy-Jell is made with an extra-grade gelatine, which the owners of Jiffy-Jell produce.



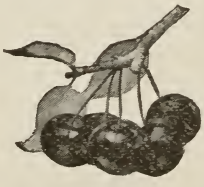
The output of this grade is limited. It costs twice as much as the common. And in these days of gelatine shortage, it is a very hard grade to insure.

ECONOMICAL DELIGHTS

Jiffy-Jell is easily digested. Its crushed-fruit taste makes it appetizing. It is made in an instant, at a trifling cost. It forms a conveyor for other foods, like whipped cream, nuts, chocolate, vegetables, rice, etc.

Mint flavor makes an ideal relish jell. Lime flavor makes a tart, zestful salad jell.

FRUIT-JUICE FLAVORS



True Fruit Flavors

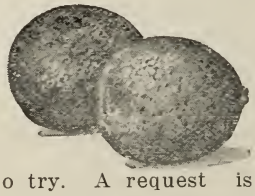
The flavors for Jiffy-Jell are made from the fruit itself. Not one is artificial.

The flavors come sealed in glass vials, so they cannot change—one vial in each package.

The flavors are abundant. For instance, half a ripe pineapple is used in the flavor for one Jiffy-Jell dessert.

No other gelatine product is accompanied by bottled flavors of this kind.

The other fruit flavors give a wide variety of tempting fruity dainties.



Please prove these facts in your own home. Let us send you some Jiffy-Jell to try. A request is sufficient.

Jiffy-Jell has been approved by Prof. Allyn of Westfield; also by Dr. Wiley.

Waukesha Pure Food Co., Waukesha, Wis.

---

10 Flavors in Glass Vials
Each package contains the flavor in separate vial

Strawberry	Orange	
Raspberry	Lemon	
Loganberry	Lime	Cherry
Mint	Pineapple	Coffee



No. B-53

We pay parcel post and express charges. We guarantee to please you or refund your money.

TOP COATS FOR PROFESSIONAL MEN IS OUR SPECIALTY

Our motor, storm and classy tourist coats are built as well as experienced men tailors can build them. The workmanship, fit finish and the reliability of the materials used at a minimum price from builder to consumer is our proposition to you, Doctors. If we do not serve you better for less money in our capacity than you can secure elsewhere you cannot use us. You are from Missouri and we are here to show you! As to our reliability we refer you to the Warren Savings Bank, Warren, Pa. Our proposition is: If you do not find our garments in every way satisfactory return them and we will cheerfully refund your money; or, send us a bank reference and we will cheerfully send you prepaid a coat for your inspection—if satisfactory, send us your check covering price of coat, if not, return it with no obligation whatever on your part. In ordering, give chest measurement over suit coat, inside seam of sleeve, your weight and height.

MEN'S ROUGH-WEATHER COAT NO. B-53

Our Special Rough-Weather Coat for Physicians.

This coat is specially built for the physician who must face the elements daily in his professional duties. A practical model in a general utility box coat for men. Material is a firmly woven hard twisted yarn in gray mixture with plaid back or black granite cloth with plaid back. Absolutely waterproof. Collar can be worn open or closed, as illustrated. As nearly indestructible as a coat can be made.

An unmatchable value at **$7.85**

Sizes 34 to 48

MEN'S TOURIST COAT NO. B-137

An ideal tourist coat for men. Material is a hard twisted oxford gray worsted. A specially prepared material making it absolutely waterproof. Silk lined throughout with extra separate yoke lining across the shoulders. Large, roomy flap pockets. Genteel enough for a dressy coat and practical enough for a general utility coat. A dependable garment and a genuine bargain. All sizes, 36 to 48.

Our Price **$12.50**

Same model in a double texture cashmere with a twilled serge lining, in tan only. **At $10.00.**



Catalogue of women's Fur Motor Coats sent upon request. Also women's, boys' and girls' storm coats.

We have a sufficient cloth in sight for 1200 coats. When present stock is exhausted an advance of $2.00 will be necessary on coat No. B-137 and $1.00 on coat B-53.



No. B-137.

Always at your service

THE DIRECT MOTOR APPAREL CO.

Warren, Pa.



The Advantages of Condensed Milk

PURITY

It is a well-established fact that fresh cows milk may contain pathogenic organisms which spread infectious diseases. When even the slightest laxness exists in the enforcement of milk laws, there is danger.

The use of condensed milk eliminates this danger.

The following extract from Dr. Coutt's Report to the Local Government Board on an Inquiry as to Condensed Milk (London 1911) gives the findings of experts:

> "All epidemiological evidence points to the conclusion that the infecting organisms of such diseases as scarlet fever, diphtheria and enteric fever *are destroyed in condensed milk.*"

Whenever fresh cows milk is under suspicion, the use of a pure, carefully prepared infant food such as Borden's Eagle Brand becomes a prophylactic measure. Eagle Brand is pure; manufactured under the most sanitary conditions from selected high-grade milk and sugar.

For sixty years it has been the standard infant food.

BORDEN'S CONDENSED MILK CO.
NEW YORK



Grains
Super-Cooked

All Food Cells Exploded

Prof. Anderson's process by which Puffed Grains are made is this:

Selected wheat or rice grains are sealed in huge guns. The guns are revolved for 60 minutes in a heat of 550 degrees. Even 400 degrees will dextrinize grain, as you know.

The moisture in each food cell is thus changed to steam. Then the guns are shot, and the steam explodes. Over 100 million separate explosions occur in every kernel.

The grains are puffed to bubbles, eight times normal size. Every granule is broken for easy digestion.

No other process, we believe, so fits these grains for food.

The thin, crisp Puffed Grains taste like confections. Yet they are simply whole grains—nothing added.

You will find these delightful foods to advise when ease of digestion must be considered.

The Quaker Oats Company
Chicago (1749)

Puffed Wheat **Puffed Rice**
and Corn Puffs
All Steam-Exploded

The Journal OF THE South Carolina Medical Association

VOL. XIII. GREENVILLE, S. C., JANUARY, 1917 NO. 1

CONTENTS

EDITORIAL Page
The Small Community Hospital.. 397
Oconee Pioneer Field for Sociological Congress—Public Health Work 399
Insurance Fees 399
The Scientific Committee Busy on the Annual Program—Spartanburg Meeting 400
ORIGINAL ARTICLES:
Observations of Affections of the Posterior Urethra by Wm. R. Barron, M. D., Columbia, S. C. 400
Abstract—Traumatic Aneurism of the Temporal Artery, by J. Shelton Horsley, M. D., Richmond, Va. 403
The Necessity of Graphic Illustration of Sanitary Conditions in a Community, by M. R. Mobley, M. D., Florence, S. C. 404
ORIGINAL ARTICLES: (Con't.) Page
Abstract—Cancer of Mammary Tissue Misplaced in Axilla, by J. Shelton Horsley, M. D., Richmond, Va. 407
The Need of and How to Obtain a Hospital in Every County in South Carolina, by L. H. Jennings, M. D., Bishopville, S. C. 407
Hemorrhage of the Newly Born; With Report of a Case, by H. L. Shaw, M. D., Fountain Inn, S. C. 408
Should the Tonsils be Removed, by W. Peyre Porcher, M. D., Charleston, S. C. 409
The Nose, by Newton T. Clark, M. D., Spartanburg, S. C. 412
ABSTRACTS 414
SOCIETY REPORTS 425
BOOK REVIEWS 427



A new and thoroughly equipped Hospital for the care of Surgical and Medical Diseases.

FEATURES:

Private and Public sun parlors, two operating rooms, building screened throughout. Homelike atmosphere. Service the best.

RATES:

$1.75 to $7.00 per day.

The Baker Sanatorium

Colonial Lake **Charleston, S. C.**

ARCHIBALD E. BAKER, M. D., Surgeon in Charge.



To Foster Bran Habits

You will find Pettijohn's, we think, the best way known to foster the bran habit.

The Breakfast Food is a wheat flake dainty of which folks never tire.

The Flour is more likable than Graham, and is used in many ways.

Both hide 25 per cent of bran—a bran which isn't gritty. And, being in flake form, it is doubly efficient.

Thousands of physicians now advise these as the ideal form of bran diet.

Pettijohn's

Rolled Wheat with Bran Flakes

Soft, flavory wheat rolled into luscious flakes, hiding 25 per cent. of unground bran. A famous breakfast dainty—20c per package.

Pettijohn's Flour is 75 per cent. fine patent flour mixed with 25 per cent. tender bran flakes. To be used like Graham flour in any recipe; but better, because the bran is unground. 30c per large package.

The Quaker Oats Co.

CHICAGO. (1485)

The Real Worth of an Infant Food

is not alone in its assimilability. The food must be lean, wholesome, uniform in quality and composition, and safe and dependable at all times.

Gail Borden
EAGLE BRAND CONDENSED MILK
THE ORIGINAL

has been used by physicians for nearly sixty years in stubborn feeding cases, where it has been deemed necessary to replace breast feedings. The confidence expressed in this well known food by the medical profession is reflected in the consistently reliable quality of the product.

Samples, Feed-Charts in any language, and our 52-page book, "Baby's Welfare," mailed upon request.



Borden's Condensed Milk Co.

"Leaders of Quality"
Established 1857
NEW YORK.

The Journal OF THE South Carolina Medical Association

VOL. XIII. GREENVILLE, S. C., FEBRUARY, 1917 NO. 2

CONTENTS

EDITORIAL Page

Optometry Bill 431

Ruling by the President on Insurance Situation 432

Program for State Association Meeting 432

ORIGINAL ARTICLES:

Practical Hydrotherapeutics as Applied to Some Gastrointestinal Disorders by George M. Niles, M. D., Atlanta, Ga. 432

Nephritis Discussed—Why Phenolsulphonephthalein? By N. B. Edgerton, M. D., Columbia, S. C. 444

Two Cases of Sudden Death Associated with Enlargement of the Thymus Occuring in the Same Family by A. Moultrie Brailsford, M. D., Mullins, S. C. 447

Conquering Medicine and Surgery by Robert Thrift Ferguson, M. D., Gaffney, S. C. 449

The Eye of the Pregnant Woman by Charles W. Kollock, M. D., Charleston, S. C. 452

Questions by State Board of Medical Examiners, Nurses, Obstetrics by Dr. E. W. Pressly, Examiner, Nov. 1916 454

ABSTRACTS 460

Meeting of Medical Association held at Charleston, S. C. 461

BOOK REVIEWS 463



A new and thoroughly equipped Hospital for the care of Surgical and Medical Diseases.

FEATURES:

Private and Public sun parlors, two operating rooms, building screened throughout. Homelike atmosphere. Service the best.

RATES:

$1.75 to $7.00 per day.

The Baker Sanatorium

Colonial Lake **Charleston, S. C.**

ARCHIBALD E. BAKER, M. D., Surgeon in Charge.



Bran Diet

Varied and Likable Extra Efficient

Pettijohn's Breakfast Food—soft rolled wheat—is to all folks a luxury dish.

Pettijohn's Flour is far better than Graham, as it can be used in as many ways.

Both now contain 25 per cent of bran flakes. So they supply bran in plenty. They supply it in flake form. And they hide it in numerous tempting foods of which people never tire.

You will find that they meet your ideal of a bran food for continuous effect.

Pettijohn's

Rolled Wheat with Bran Flakes

Soft, flavory wheat rolled into luscious flakes, hiding 25 per cent of unground bran. A famous breakfast dainty.

Pettijohn's Flour is 75 per cent fine patent flour mixed with 25 per cent tender bran flakes. To be used like Graham flour in any recipe; but better, because the bran is unground.

The Quaker Oats Company

Chicago (1511)

Quality and Reliability

are important factors which physicians and dieticians consider, when selecting a safe, wholesome and satisfying milk for infant feeding.

Gail Borden
EAGLE
BRAND
CONDENSED
MILK
THE ORIGINAL

which received the Grand Prize (Highest Award) at the recent San Francisco and San Diego Expositions, stands pre-eminently at the head of its class of reliable and dependable foods.

Samples, Feed-Charts in any language, and our 52-page book, "Baby's Welfare," mailed upon request.



Borden's Condensed Milk Co.

"Leaders of Quality"
Established 1857
NEW YORK.

The Journal OF THE South Carolina Medical Association

VOL. XIII. GREENVILLE, S. C., MARCH, 1917 NO. 3

SPARTANBURG NUMBER

CONTENTS

EDITORIAL Page

Provisional Program Meeting ... 463
The Call to Spartanburg 465
Death of Dr. John L. Dawson of Charleston 465
An Act to Regulate the Practice of Opticians and Optometrists for S. C. 466
Committees 471
Preparedness and Organized Medicine 471
Ladies Invited to Spartanburg Meeting 472
Papers Promised Sufficient 472
Hotel Rates for Spartanburg Meeting 472
Diphtheria 472
SPARTANBURG 474
ORIGINAL ARTICLES:
Venereal Prophylaxis by Marion H. Wyman, M. D., Columbia, S. C. 488
SOCIETY REPORTS 491
PERSONAL AND NEWS ITEMS ... 492
BOOK REVIEWS 494



A new and thoroughly equipped Hospital for the care of Surgical and Medical Diseases.

FEATURES:

Private and Public sun parlors, two operating rooms, building screened throughout. Homelike atmosphere. Service the best.

RATES:

$1.75 to $7.00 per day.

The Baker Sanatorium

Colonial Lake **Charleston, S. C.**

ARCHIBALD E. BAKER, M. D., Surgeon in Charge.

Quality and Reliability

are important factors which physicians and dieticians consider, when selecting a safe, wholesome and satisfying milk for infant feeding.

Gail Borden
EAGLE
BRAND
CONDENSED
MILK
THE ORIGINAL

which received the Grand Prize (Highest Award) at the recent San Francisco and San Diego Expositions, stands pre-eminently at the head of its class of reliable and dependable foods.

Samples, Feed-Charts in any language, and our 52-page book, "Baby's Welfare," mailed upon request.



Borden's Condensed Milk Co.
"Leaders of Quality"
Established 1857
NEW YORK.



Oat Food

Made Doubly-Delicious

All the world over Quaker Oats is the favorite brand of oat food.

Even in the British Isles, from which we used to import Scotch and Irish oats.

That is because of a flavor which has never been matched, and which gives a new delight to the oat dish.

Quaker Oats

Queen Oats Flaked

The luscious flavor is due to selection. All the puny, starved grains are discarded. We get but ten pounds of plump grains from a bushel, fit for Quaker Oats.

So in this brand one gets just the cream of the oats. Only large, white flakes, with their exquisite flavor and aroma.

10c and 25c Per Package
Except in Far West and South

The Quaker Oats Company
Chicago (1483)

393

MAY 3 1917

BOSTON MEDICAL LIBRARY MAY 3 1917

The Journal OF THE South Carolina Medical Association

VOL. XIII. GREENVILLE, S. C., APRIL, 1917 NO. 4

CONTENTS

EDITORIALS Page

Meeting of Association of Sanitarians, Greenville 497
Respond Promptly to Our Country's Call 497
Medical College Wants Names of Alumni 497
Spartanburg Meeting a Success .. 498

ORIGINAL ARTICLES:

How to Increase the Individual and Collective Efficiency of the Medical Profession of South Carolina, by C. B. Earle, M. D. Greenville, S. C. 498
Vaginal Caesarian Section by G. F. Wilson, M. D., Charleston, S. C. 501
The Study of Medicine by W. F. R. Phillips, M. D., Charleston, S. C. 504

SOCIETY REPORTS 516
PERSONAL AND NEWS ITEMS... 520
ABSTRACTS:
Gastric Ulcer 527
Knee Joint Derangements 529



A new and thoroughly equipped Hospital for the care of Surgical and Medical Diseases.

FEATURES:

Private and Public sun parlors, two operating rooms, building screened throughout. Homelike atmosphere. Service the best.

RATES:

$1.75 to $7.00 per day.

The Baker Sanatorium

Colonial Lake **Charleston, S. C.**

ARCHIBALD E. BAKER, M. D., Surgeon in Charge.

Simplicity of Preparation

together with ease of assimilation and the assurance that the food prescribed in stubborn and difficult Infant Feeding cases is clean, wholesome and dependable, have earned for

Gail Borden
EAGLE
BRAND
CONDENSED
MILK
THE ORIGINAL

the confidence of the medical profession. Physicians everywhere do not hesitate to prescribe "Eagle Brand" in cases where a high nutritive strength and caloric value is desired.

Samples, Analysis, Feeding Charts in any language, and our 52-page book, "Baby's Welfare," will be mailed upon receipt of professional card.



Borden's Condensed Milk Co.
"Leaders of Quality"
Established 1857
NEW YORK.



Puffed Wheat
In Milk



Why Every Atom Feeds

Puffed Wheat and Rice are whole grains steam exploded.

A separate explosion occurs in each food cell. Over 100 million occur in each kernel. So every granule is blasted.

The result is easy, complete digestion. And the grains are food confections. They are airy, flaky, thin and nut-like. Whole-grain bubbles, eight times normal size.

Prof. A. P. Anderson is the inventor. His object was to fit grains for food as they never were fitted before. And that is the result.

There are many cases where Puffed Grain foods will best meet your requirements.

The Quaker Oats Company
Chicago
(1588)

Puffed Wheat **Puffed Rice**
and Corn Puffs
Each 15c Except in Far West

JUN-4 1917

The Journal OF THE South Carolina Medical Association

VOL. XIII. GREENVILLE, S. C., MAY, 1917 NO. 5

CONTENTS

EDITORIALS Page

Should Physicians Take Vacations 521

Doctors J. W. Jervey and J. W. Curry exonorated of the charges of Unprofessional and Unethical Conduct 533

Petition 534

Report of Council 535

ORIGINAL ARTICLES

The necessity of Routine Genito-Urinary Examinations in the Practice of Medicine and Surgery by Milton Weinberg, M. D., Sumter, S. C. 536

Health Education in Rural Districts by L. A. Riser, M. D., Columbia, S. C. ... 538

Psychiatry and the General Practitioner by Wm. C. Sandy, M. D., Columbia, S. C. 540

The Report of a Series of Three Hundred Cataract Operations by Chas. W. Kollock, M. D., Charleston, S. C. .. 544

The Presenting Symptoms in 300 Consecutive Cases of Syphilis by R. H. Lafferty, M. D., and S. R. Thompson, M. D., Charlotte, N. C. 548

Exopthalmic Goitre, by Sam Orr Black, M. D., Philadelphia, Pa. 551

Diverticulitis of the Appendix by Julius H. Taylor, M. D., F. A. C. S., Columbia, S. C. 555

SOCIETY REPORTS 557

BOOK REVIEWS 560

ABSTRACTS 562



A new and thoroughly equipped **Hospital for the care of Surgical and Medical Diseases.**

FEATURES:

Private and Public sun parlors, two operating rooms, building screened throughout. Homelike atmosphere. Service the best.

RATES:

$1.75 to $7.00 per day.

The Baker Sanatorium

Colonial Lake **Charleston, S. C.**

ARCHIBALD E. BAKER, M. D., Surgeon in Charge.

The Nutritional Strength and Caloric Value

of a food is the first thought when laying out a dietetic schedule. Physicians and dietitians have for a long time recognized the nutritional strength and caloric value of

Gail Borden
EAGLE
BRAND
CONDENSED
MILK
THE ORIGINAL

This well known product has the added advantage of being a clean, wholesome and easily prepared food, which is reliably dependable at all times.



Samples, Analysis, Literature, etc.. mailed upon receipt of professional card.

Borden's Condensed Milk Co.

"Leaders of Quality"
Established 1857
NEW YORK.

Extra-Fine Oat Food

Some folks still think that the best oats are imported.

But all the world over Quaker Oats dominates. Even in the British Isles—the home of Scotch and Irish oats—Quaker is the largest-selling brand.

All because we use the queen grains only. The puny, starved grains are omitted. We get but ten pounds of Quaker Oats from a bushel.

That's the secret of the wondrous flavor which holds millions to Quaker Oats. And that's the reason everyone should get them.

They cost no extra price.

10c and 25c Per Package
Except in Distant Sections

Quaker Oats

The Flavory Flakes

(1594)

The Journal OF THE South Carolina Medical Association

VOL. XIII. GREENVILLE, S. C., JUNE, 1917 NO. 6

CONTENTS

EDITORIALS

Food, Beverages and Milk Products in the Dietary..... 565

The Selective Draft Should be Applied to the Medical Profession.... 566

Read The Minutes..... 568

A. M. A. Notes..... 568

The Physician's Practice Who Goes to Front 568

Agreement 570

Proposed Form Letter 570

Minutes 571



A new and thoroughly equipped Hospital for the care of Surgical and Medical Diseases.

FEATURES:

Private and Public sun parlors, two operating rooms, building screened throughout. Homelike atmosphere. Service the best.

RATES:

$1.75 to $7.00 per day.

The Baker Sanatorium

Colonial Lake **Charleston, S. C.**

ARCHIBALD E. BAKER, M. D., Surgeon in Charge.

Digestive Disturbances

due to faulty or improper food—are successfully overcome by prescribing

Gail Borden EAGLE BRAND CONDENSED MILK
THE ORIGINAL

which is made from the highest quality of raw materials by the most modern and sanitary methods of manufacture —guaranteeing a fininshed product that at all times is clean, wholesome and dependable.



Samples, Analysis, Literature, etc.. mailed upon receipt of professional card.

Borden's Condensed Milk Co.
"Leaders of Quality"
Established 1857
NEW YORK.



Puffed Wheat in Milk

All Food Cells Exploded

We create in each grain of Puffed Wheat or Rice more than 100 million explosions.

The bit of moisture inside of each granule is changed to steam. Then, by shooting from guns, all these cells are exploded.

Thus the grains are puffed to bubbles, eight times normal size. They are made thin, airy, flaky, crisp—fascinating morsels.

They are fitted for easy, complete digestion. And every atom feeds.

These are Prof. Anderson's hygienic foods. No other process, we believe, breaks half so many food cells. In many cases you will find them just the foods you want.

The Quaker Oats Company
Chicago

(1587)

Puffed Wheat **Puffed Rice**
and Corn Puffs
Each 15c Except in Far West

BOSTON MEDICAL
AUG 8 1917
LIBRARY

The Journal OF THE South Carolina Medical Association

VOL. XIII. GREENVILLE, S. C., JULY, 1917 NO. 7

CONTENTS

EDITORIALS:

South Carolina Doctors Ready for Service 597

Physicians in South Carolina Appointed on Exemption Boards 598

ORIGINAL ARTICLES:

Medical Examination of the School Children of the City of Florence, S. C. 599

The Diagnosis and Treatment of Amebic Dysentery 603

Oral Infections 607

MINUTES 610

SOCIETY REPORTS 615

BOOK REVIEWS 617

ABSTRACTS 618



A new and thoroughly equipped Hospital for the care of Surgical and Medical Diseases.

FEATURES:

Private and Public sun parlors, two operating rooms, building screened throughout. Homelike atmosphere. Service the best.

RATES:

$1.75 to $7.00 per day.

The Baker Sanatorium

Colonial Lake **Charleston, S. C.**

ARCHIBALD E. BAKER, M. D., Surgeon in Charge.

Digestive Disturbances

in infants can usually be traced to faulty or improper food. These disagreeable conditions are successfully overcome by prescribing

Gail Borden
EAGLE
BRAND
CONDENSED
MILK
THE ORIGINAL

which is made from the highest quality of raw materials by the most modern and sanitary methods of manufacture—guaranteeing a finished product—that at all times is clean, wholesome and dependable for Infant Feeding.



Samples, Analysis, Literature, etc., mailed upon receipt of professional card.

Borden's Condensed Milk Co.
"Leaders of Quality"
Established 1857
NEW YORK.

Some Oats

Are puny, starved, insipid. So we discard them in making Quaker Oats.

Some Oats

Are big and plump—rich in that wondrous flavor Nature gives to oats.

We use these queen grains only in making Quaker Oats. And we get but ten pounds from a bushel.

That is why Quaker Oats rule the world over. In a hundred nations folks consume a billion dishes yearly.

And that is why folks should be sure to get them. They cost no extra price.

10c and 25c Per Package
Except in Distant Sections

Quaker Oats

The Flavory Flakes

(1595)

The Journal of the South Carolina Medical Association

VOL. XIII. GREENVILLE, S. C., AUGUST, 1917 NO. 8

CONTENTS

EDITORIALS:

The Medical Profession of America Must Supply its Quota of Doctors for the Army 627

Medical Officers Reserve Corps 628

Correction 629

Our Advertisers 629

Keep the Society Going 640

Spartanburg County Hospital 630

ORIGINAL ARTICLES:

Hospital Standardization by John G. Newman, Director American College of Surgeons, Chicago, Ill 631

Medical Aspects of the Social Hygiene Movement by Dr. Rachelle S. Yarros, University of Illinois, Chicago, Illinois 637

MINUTES 647

SOCIETY REPORTS 654

BOOK REVIEWS 656



A new and thoroughly equipped **Hospital for the** care of Surgical and Medical Diseases.

FEATURES:

Private and Public sun parlors, two operating rooms, building screened throughout. Homelike atmosphere. Service the best.

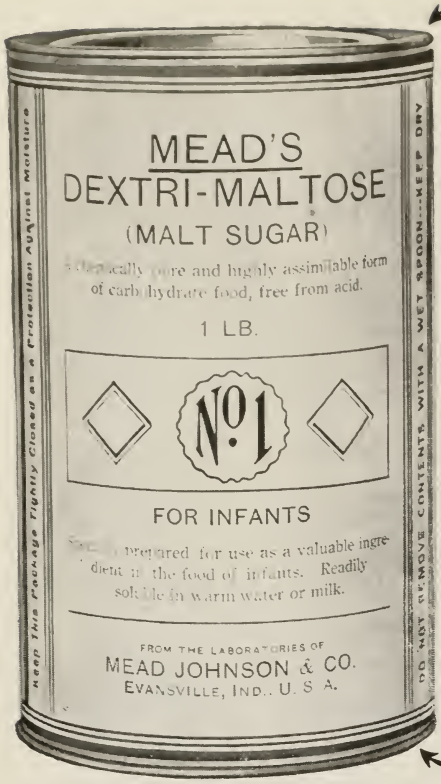
RATES:

$1.75 to $7.00 per day.

The Baker Sanatorium

Colonial Lake **Charleston, S. C.**

ARCHIBALD E. BAKER, M. D., Surgeon in Charge.



MAXIMUM

TOLERANCE, ASSIMILABILITY

\+

MINIMUM

DIGESTIVE DISTURBANCES, DIARRHOEA

=

An Efficient Carbohydrate

Is why nearly all pediatrists prescribe **Mead's Dextri-Maltose** in formulae for

INFANT FEEDING

Let us send you samples and literature fully describing the simplicity of using Dextri-Maltose in any milk mixture in the same proportion as milk or cane sugar, but with better results.

MEAD JOHNSON & CO.
Evansville, Indiana

NEW ORLEANS POLYCLINIC

Graduate School of Medicine, Tulane University of Louisiana
Thirty-first Annual Session opens Sept. 24, 1917, and closes June 8, 1918.

Physicians will find the Polyclinic an excellent means for posting themselves upon modern progress in all branches of medicine and surgery, including laboratory and cadaveric work. Special attention given to military matters this session. For further information, address:

CHARLES CHASSAIGNAC, M. D., Dean,
NEW ORLEANS POLYCLINIC,
Post Office Drawer 770 NEW ORLEANS.

Tulane also offers highest class education leading to degrees in Medicine, Pharmacy, Dentistry, Hygiene and Tropical Medicine.

TUBERCULOSIS



SANATORIUM-IN-THE-PINES

Dr. Morse's Sanatorium

HENDERSONVILLE, N. C.

A modern Sanatorium for the treatment of Pulmonary Tuberculosis amid ideal surroundings. Conscientious personal supervision freed from "Institutionalism" characterizes the Sanatorium.

RATES $17.50 TO $30.00.

Booklet on Request—Address

Dr. Morse's Sanatorium

Box 3, - - - **Hendersonville, N. C.**

OCT 5 1917

The Journal OF THE South Carolina Medical Association

VOL. XIII. GREENVILLE, S. C., SEPTEMBER, 1917 NO. 9

CONTENTS

EDITORIALS:
Camp Greenleaf, M. O. T. C., Ft. Oglethorpe, Ga. ---- 659
State-Wide Anti-Tuberculosis Campaign 660
Expenses M. O. R. C. ---- 661
Fourth District Meeting ---- 662
The Adaptation of External Methods in in the Treatment of Gastrointestinal Disorders ---- 662
United States Food Administration ---- 665
United States Food Administration ---- 667
ORIGINAL ARTICLES:
A Discussion of Some of the Predisposing Influences of Nervous and Mental Diseases by J. F. Munnerlyn, M. D., Columbia, S. C. ---- 668
Carcinoma of Female Breast by Hugh S. Black, A. B. D., Philadelphia ---- 671
Stones in the Urinary Tract by E. P. Merritt, M. D., Atlanta, Ga. ---- 676
A Plea for Local Anesthesia in Major Surgery by J. H. Johns, M. D., Westminster, S. C. ---- 678
SOCIETY REPORTS ---- 683
BOOK REVIEWS ---- 683
ABSTRACTS ---- 684



A new and thoroughly equipped Hospital for the care of Surgical and Medical Diseases.

FEATURES:

Private and Public sun parlors, two operating rooms, building screened throughout. Homelike atmosphere. Service the best.

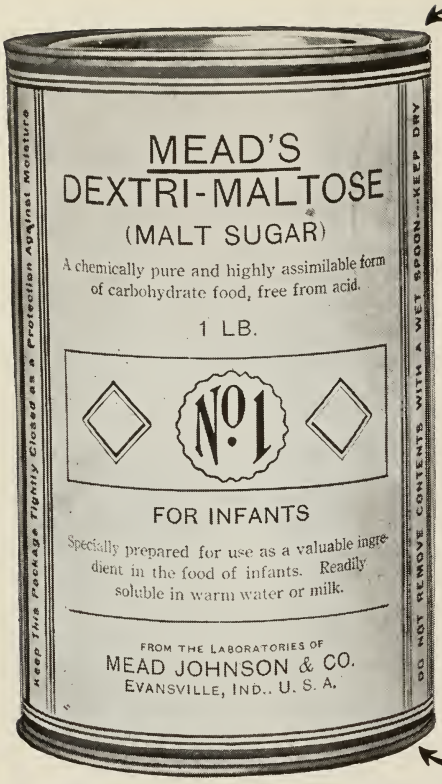
RATES:

$1.75 to $7.00 per day.

The Baker Sanatorium

Colonial Lake **Charleston, S. C.**

ARCHIBALD E. BAKER, M. D., Surgeon in Charge.



MAXIMUM

TOLERANCE, ASSIMILABILITY

\+

MINIMUM

DIGESTIVE DISTURBANCES, DIARRHOEA

=

An Efficient Carbohydrate

Is why nearly all pediatrists prescribe **Mead's Dextri-Maltose** in formulae for

INFANT FEEDING

Let us send you samples and literature fully describing the simplicity of using Dextri-Maltose in any milk mixture in the same proportion as milk or cane sugar, but with better results.

MEAD JOHNSON & CO.
Evansville, Indiana

NEW ORLEANS POLYCLINIC

Graduate School of Medicine, Tulane University of Louisiana
Thirty-first Annual Session opens Sept. 24, 1917, and closes June 8, 1918.

Physicians will find the Polyclinic an excellent means for posting themselves upon modern progress in all branches of medicine and surgery, including laboratory and cadaveric work. Special attention given to military matters this session. For further information, address:

CHARLES CHASSAIGNAC, M. D., Dean,
NEW ORLEANS POLYCLINIC,
Post Office Drawer 770 NEW ORLEANS.

Tulane also offers highest class education leading to degrees in Medicine, Pharmacy, Dentistry, Hygiene and Tropical Medicine.

TUBERCULOSIS



SANATORIUM-IN-THE-PINES

Dr. Morse's Sanatorium

HENDERSONVILLE, N. C.

A modern Sanatorium for the treatment of Pulmonary Tuberculosis amid ideal surroundings. Conscientious personal supervision freed from "Institutionalism" characterizes the Sanatorium.

RATES $17.50 TO $30.00.

Booklet on Request—Address

Dr. Morse's Sanatorium

Box 3, - - - **Hendersonville, N. C.**

E.C.
484
BOSTON MEDICAL LIBRARY
NOV 6 1917

The Journal OF THE South Carolina Medical Association

VOL. XIII. GREENVILLE, S. C., OCTOBER, 1917 NO. 10

CONTENTS

EDITORIALS:

State Board of Health Notes.....691
Medical Reserve Corps.....692
The Southern Medical Association....692
Spartanburg County Hospital.....692

ORIGINAL ARTICLES:

The Roentgen Ray Diagnosis of Chronic Appendicitis by A. Robert Taft, M. D., Charleston, S. C.....693
The Use of Dakin's Solution in Gangrenous Endometritis, Following Puerperal Sepsis by Belton J. Workman, M. D., Charleston, S. C. 704
Uterine Evacuations, Elective and Enforced. The Cesarian and Porro Operations. Case Reports by Samuel Orr Black, A. B., M. D., Rochester, Minn.....707
A Postgraduate Course in Anatomy at Home by W. F. R. Phillips, M. D., Prof. of Anatomy, Medical College of South Carolina.....710
Society Reports 715
Book Reviews 715
Abstracts 717



A new and thoroughly equipped Hospital for the care of Surgical and Medical Diseases.

FEATURES:

Private and Public sun parlors, two operating rooms, building screened throughout. Homelike atmosphere. Service the best.

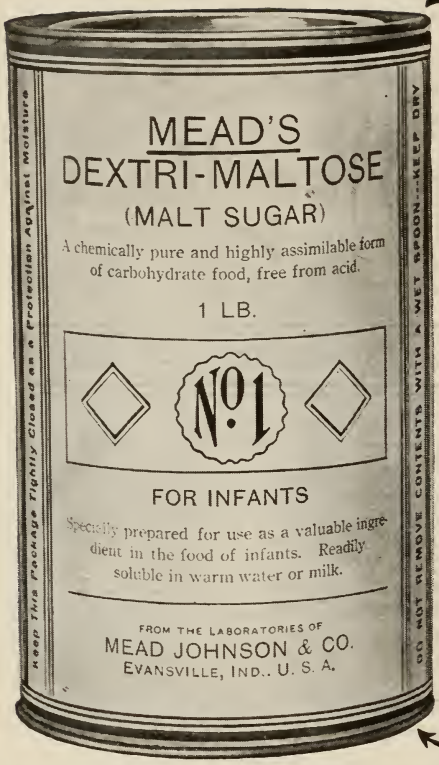
RATES:

$1.75 to $7.00 per day.

The Baker Sanatorium

Colonial Lake **Charleston, S. C.**

ARCHIBALD E. BAKER, M. D., Surgeon in Charge.



MAXIMUM

TOLERANCE, ASSIMILABILITY

\+

MINIMUM

DIGESTIVE DISTURBANCES, DIARRHOEA

=

An Efficient Carbohydrate

Is why nearly all pediatrists prescribe **Mead's Dextri-Maltose** in formulae for

INFANT FEEDING

Let us send you samples and literature fully describing the simplicity of using Dextri-Maltose in any milk mixture in the same proportion as milk or cane sugar, but with better results.

MEAD JOHNSON & CO.
Evansville, Indiana

NEW ORLEANS POLYCLINIC

Graduate School of Medicine, Tulane University of Louisiana
Thirty-first Annual Session opens Sept. 24, 1917, and closes June 8, 1918.

Physicians will find the Polyclinic an excellent means for posting themselves upon modern progress in all branches of medicine and surgery, including laboratory and cadaveric work. Special attention given to military matters this session. For further information, address:

CHARLES CHASSAIGNAC, M. D., Dean,
NEW ORLEANS POLYCLINIC,
Post Office Drawer 770 **NEW ORLEANS.**

Tulane also offers highest class education leading to degrees in Medicine, Pharmacy, Dentistry, Hygiene and Tropical Medicine.

TUBERCULOSIS



SANATORIUM-IN-THE-PINES

Dr. Morse's Sanatorium

HENDERSONVILLE, N. C.

A modern Sanatorium for the treatment of Pulmonary Tuberculosis amid ideal surroundings. Conscientious personal supervision freed from "Institutionalism" characterizes the Sanatorium.

RATES $17.50 TO $30.00.

Booklet on Request—Address

Dr. Morse's Sanatorium

Box 3, - - - Hendersonville, N. C.

484

The Journal OF THE South Carolina Medical Association

VOL. XIII. GREENVILLE, S. C., NOVEMBER, 1917 NO. 11

CONTENTS

EDITORIALS:

Committee Appointments by President F. H. McLeod for Year, 1917-18 ------ 723

Joe Lawrence Dawson, M. D. ---------- 723

Resolutions ---------- 724

ORIGINAL ARTICLES:

The Value of Thorough X-ray Examination in all Injuries, The X-ray in Military Surgery by W. Frank Ashmore, M. D., Anderson, S. C. ---------- 756

Hydrotherapeutic Hints Boiled Down For the General Practitioner by W. W. Blackman, M. D., Atlanta, Ga. ---------- 727

Ectopic Pregnancy by J. C. Harris, M. D., Anderson, S. C. ---------- 730

Auto-Serum in Arthritis as Used by the Author by Dr. William R. Barron, Columbia, S. C. ---------- 735

Society Reports ---------- 736

Book Reviews ---------- 738

Abstracts ---------- 739



A new and thoroughly equipped Hospital for the care of Surgical and Medical Diseases.

FEATURES:

Private and Public sun parlors, two operating rooms, building screened throughout. Homelike atmosphere. Service the best.

RATES:

$1.75 to $7.00 per day.

The Baker Sanatorium

Colonial Lake **Charleston, S. C.**

ARCHIBALD E. BAKER, M. D., Surgeon in Charge.

Have You an Infant Feeding Problem?

If so, the hand booklet, *"Successful Infant Feeding,"* mailed on your request will help you solve it. It contains the essentials of simplified infant feeding methods evolved within the past few years—a reformation beginning with the discovery that the sugars used in infant feeding cause more trouble than the curds of cow's milk.

Modern Infant Feeding is Successful

because its methods are simple, understandable, easy to use, and yield dependably good results. It provides diets suitable for the individual well infant, which cause a normal gain in weight, also efficient corrective diets for digestive disturbances. MEAD'S DEXTRI-MALTOSE is largely used in these diets because it is more readily assimilable than cane sugar or milk sugar, and correspondingly less liable to cause the troubles of sugar fermentation. NO DIRECTIONS for use accompany packages of MEAD'S DEXTRI-MALTOSE. It is made for physicians' use only.

Mead Johnson & Co. Evansville, Indiana

NEW ORLEANS POLYCLINIC

Graduate School of Medicine, Tulane University of Louisiana
Thirty-first Annual Session opens Sept. 24, 1917, and closes June 8, 1918.

Physicians will find the Polyclinic an excellent means for posting themselves upon modern progress in all branches of medicine and surgery, including laboratory and cadaveric work. Special attention given to military matters this session. For further information, address:

CHARLES CHASSAIGNAC, M. D., Dean,
NEW ORLEANS POLYCLINIC,
Post Office Drawer 770 NEW ORLEANS.

Tulane also offers highest class education leading to degrees in Medicine, Pharmacy, Dentistry, Hygiene and Tropical Medicine.

TUBERCULOSIS



SANATORIUM-IN-THE-PINES

Dr. Morse's Sanatorium

HENDERSONVILLE, N. C.

A modern Sanatorium for the treatment of Pulmonary Tuberculosis amid ideal surroundings. Conscientious personal supervision freed from "Institutionalism" characterizes the Sanatorium.

RATES $17.50 TO $30.00.

Booklet on Request—Address

Dr. Morse's Sanatorium

Box 3, - - - Hendersonville, N. C.

The Journal OF THE South Carolina Medical Association

VOL. XIII. GREENVILLE, S. C., DECEMBER, 1917 NO. 12

CHILD WELFARE NUMBER

CONTENTS

EDITORIALS:
Child Welfare Work in Columbia 747
Child Welfare in War-Time..... 747
Bureau of Child Hygiene For South Carolina 751
U. S. Children's Bureau Begins Work in South Carolina 752
School Medical Inspection Law for South Carolina 752
Symposium Papers on Infant Mortality Published 753
A Child Welfare Number in Winter.. 753
Child Welfare Work in Charleston... 754
Earth's Tragedy 755
Gov. Bickett on Medical Inspection... 755
War Program 756
Contributors to this Number..... 760
ORIGINAL ARTICLES:
Infant Welfare Work in Iowa by L. Rosa H. Gantt, M. D., Spartanburg, S. C. 761
A State Wide Plan for Infant and Material Welfare by William Weston, M. D., Columbia, S. C..... 762
Improvement of Rural Obstretics With Special Reference to the Midwife by G. F. Klugh, M. D., Cross Hill, S. C., ... 765
Pediatrics for the General Practitioner by R. M. Pollitzer, M. D., Charleston, S. C. 766
A Way to Cure a Child of Enteric Infection Accompanied by Greenish Stools by L. F. Robinson, M. D., Greenville S. C., ... 768
Child Welfare Work in the Rural Districts of South Carolina by L. A. Riser, M. D., Columbia, S. C.... 770
Infant Mortality in South Carolina and the South by E. A. Hines, M. D., Seneca, S. C. 770
Abstracts 774



A new and thoroughly equipped Hospital for the care of Surgical and Medical Diseases.

FEATURES:

Private and Public sun parlors, two operating rooms, building screened throughout. Homelike atmosphere. Service the best.

RATES:

$1.75 to $7.00 per day.

The Baker Sanatorium

Colonial Lake Charleston, S. C.

ARCHIBALD E. BAKER, M. D., Surgeon in Charge.

Have You an Infant Feeding Problem?

If so, the hand booklet, *"Successful Infant Feeding,"* mailed on your request will help you solve it. It contains the essentials of simplified infant feeding methods evolved within the past few years—a reformation beginning with the discovery that the sugars used in infant feeding cause more trouble than the curds of cow's milk.

Modern Infant Feeding is Successful

because its methods are simple, understandable, easy to use, and yield dependably good results. It provides diets suitable for the individual well infant, which cause a normal gain in weight, also efficient corrective diets for digestive disturbances. MEAD'S DEXTRI-MALTOSE is largely used in these diets because it is more readily assimilable than cane sugar or milk sugar, and correspondingly less liable to cause the troubles of sugar fermentation. NO DIRECTIONS for use accompany packages of MEAD'S DEXTRI-MALTOSE. It is made for physicians' use only.

Mead Johnson & Co. Evansville, Indiana

NEW ORLEANS POLYCLINIC

Graduate School of Medicine, Tulane University of Louisiana
Thirty-first Annual Session opens Sept. 24, 1917, and closes June 8, 1918.

Physicians will find the Polyclinic an excellent means for posting themselves upon modern progress in all branches of medicine and surgery, including laboratory and cadaveric work. Special attention given to military matters this session. For further information, address:

CHARLES CHASSAIGNAC, M D., Dean,
NEW ORLEANS POLYCLINIC,
Post Office Drawer 770 NEW ORLEANS.

Tulane also offers highest class education leading to degrees in Medicine, Pharmacy, Dentistry, Hygiene and Tropical Medicine.

TUBERCULOSIS



SANATORIUM-IN-THE-PINES

Dr. Morse's Sanatorium

HENDERSONVILLE, N. C.

A modern Sanatorium for the treatment of Pulmonary Tuberculosis amid ideal surroundings. Conscientious personal supervision freed from "Institutionalism" characterizes the Sanatorium.

RATES $17.50 TO $30.00.

Booklet on Request—Address

Dr. Morse's Sanatorium

Box 3, - - - Hendersonville, N. C.

